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# Alcan Aluminium Limited

## 1966 Annual Report

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The Annual Meeting of the shareholders of Alcan Aluminium Limited will be held on Thursday, 27 April 1967, at 11 a.m. in Place Ville Marie, Montreal.

On pourra se procurer le texte français de ce rapport annuel en s'adressant au secrétariat de la Compagnie, case postale 6090, Montréal 3, Canada.

Alcan Aluminium Limited  
1 Place Ville Marie, Montreal 3, Canada  
Mail: Box 6090

*COVER* The design of the cover is based on the flags of the thirty countries in which Alcan subsidiaries or affiliates conducted operations in 1966, arranged in alphabetical order of country names. Flags are identified on pages 10 to 24. The colors are approximate and the flag shapes are representational only since the official proportions of flags may vary considerably in various countries.

*TERMS* In this report, all amounts are in Canadian dollars and all quantities are in short tons of 2,000 pounds each, unless otherwise stated.

The term "Alcan" refers to the parent Alcan Aluminium Limited itself, or to one or more subsidiary companies as indicated by the context.



## Directors

FIELD-MARSHAL THE RT. HON. THE EARL  
ALEXANDER OF TUNIS, K.G., London

DANA T. BARTHOLOMEW, Montreal  
Vice President of Alcan Aluminium Limited

FRASER W. BRUCE, Montreal  
President of Aluminum Company of Canada, Ltd

DR. DONALD K. DAVID, Osterville, Massachusetts  
Former Vice Chairman of the Board of Ford Foundation

NATHANAEL V. DAVIS, Montreal  
President of Alcan Aluminium Limited

JAMES A. DULLEA, Westport, Connecticut  
Consultant to Alcan Aluminium Limited

N. BAXTER JACKSON, New York  
Chairman of International Advisory Board,  
Chemical Bank New York Trust Company

PAUL LAROQUE, Montreal  
Vice President of Alcan Aluminium Limited

R. E. POWELL, Montreal  
Honorary Chairman of Aluminum Company of Canada, Ltd

H. H. RICHARDSON, Montreal  
Consultant to Alcan Aluminium Limited

HON. JAMES SINCLAIR, P.C., Vancouver  
Chairman of Lafarge Cement of North America Ltd.

M. B. de SOUSA PERNES, Geneva  
President of Alcan Aluminium S.A.

JOHN L. SULLIVAN, Washington  
Attorney, Sullivan, Shea and Kenney

M. P. WEIGEL, Montreal  
Vice President of Alcan Aluminium Limited

EDWIN J. MEJIA, San Francisco  
Honorary Director; Consultant to  
Alcan Aluminium Limited

## Officers

NATHANAEL V. DAVIS  
President

DANA T. BARTHOLOMEW  
Vice President and Chief Financial Officer

FRASER W. BRUCE  
Vice President

PAUL LAROQUE  
Vice President, Secretary and Legal Officer

M. P. WEIGEL  
Vice President and Chief Operations Officer

DAVID M. CULVER  
Chief Sales Officer

HOLBROOK R. DAVIS  
Chief Employee Relations Officer

J. F. EVANS  
Chief Administrative Officer

J. F. HORWOOD  
Chief Technical Officer

D. M. KERTLAND  
Treasurer and Accounting Officer

DUNCAN C. CAMPBELL  
Public Relations Officer

K. C. BALA  
Assistant Secretary

A. A. BRUNEAU  
Assistant Secretary

W. B. FINDLAY  
Assistant Secretary

W. E. F. JOHNSON  
Assistant Treasurer

## Summary of the Year 1966

### RESULTS

	year ending 31st December	
	1966	1965
Sales and operating revenues . . . . .	\$ 998.3 million	\$ 890.3 million
Depreciation and deferred income taxes . . . . .	83.3 million	74.4 million
Income before income taxes . . . . .	144.7 million	128.9 million
Net income . . . . .	77.7 million	62.4 million
Alcan Aluminium Limited preferred dividends . . . . .	2.6 million	2.6 million
Profit per common share (after preferred dividends) . . . . .	2.41	1.93
Common dividends per share . . . . .	(U.S.) 0.925	(U.S.) 0.825

### RELATED STATISTICS

Additions to plant and investments . . . . .	122.2 million	143.3 million
Sales of aluminum products (tons) . . . . .	1,115,471	993,115

### BALANCE SHEET ITEMS

	31st December	
	1966	1965
Net current assets . . . . .	\$ 332.1 million	\$ 330.9 million
Land, plants and facilities (net) . . . . .	1,068.9 million	1,024.0 million
Debt not maturing within one year . . . . .	578.7 million	587.4 million
Common shareholders' equity . . . . .	624.0 million	566.1 million
Book value per common share . . . . .	20.04	18.21

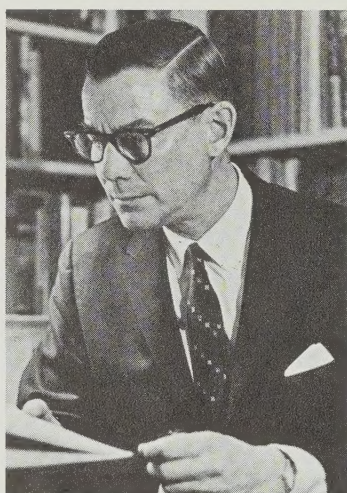
### SHAREHOLDERS

	31st December	
	1966	1965
Number of preferred shareholders according to share register . . . . .	6,886	6,202
Number of common shareholders according to share register . . . . .	56,689	52,409
Residents of Canada . . . . .	29,308	25,610
Residents of U.S.A. . . . .	25,416	24,762
Residents of other countries . . . . .	1,965	2,037
Percentage of common shares held		
By residents of Canada . . . . .	36.0%	31.1%
By residents of U.S.A. . . . .	60.1%	65.0%
By residents of other countries . . . . .	3.9%	3.9%

### EMPLOYEES

Number of employees . . . . .	64,292	60,130
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## Report to the Shareholders

Another year of strong demand for aluminum products in most world markets, particularly in North America, provided the basis for greatly improved results. With new high levels of sales and improved prices, 1966 proved to be the best profit year in Alcan's history.

In many other respects also the year was an eventful one. The tonnage of sales of semi-fabricated and finished products came close to equalling the tonnage of sales in primary form. The total dollar sales and operating revenues fell just short of the billion dollar level. The approach to these milestones is largely the outgrowth of the many new or expanded fabricating projects undertaken on a broad geographic front over the past several years.

For Alcan, the year 1966 brought a steady rise in the operating rates of its aluminum smelters in Canada, with the prospect of virtually full utilization of all the Company's Canadian assets in 1967. Significant steps were taken towards broadening the base of raw material

supplies from several geographic areas, and there was an important clarification of the legal position arising from the acquisition in 1965 of certain fabricating facilities in the United States.

Another important development was an agreement concluded with the Kingdom of Norway, under which Alcan has entered a full partnership with the Norwegian Government in the largest aluminum producer in Norway and one of the largest in Europe — A/S Ardal og Sunndal Verk.

The impact of these new developments — all of which are more fully described elsewhere in this report — places the Company in a stronger and better balanced position to meet and benefit from future opportunities.

The year's results in brief were:

NET INCOME of Alcan Aluminium Limited consolidated after all charges, including dividends on preferred shares of subsidiaries, was \$77.7 million in 1966 as compared with \$62.4 million for the year 1965.

EARNINGS for the common shares (after allowing for dividends on the Company's preferred shares) were \$2.41 per share on the 31,137,066 outstanding shares as compared with \$1.93 per share (after a 17-cent non-recurring charge) on the 31,086,642 shares outstanding at the end of 1965.

CONSOLIDATED SALES of aluminum at 1,115,500 tons again set a new record, over 12 percent larger than the 993,100 tons sold in 1965.

SALES AND OPERATING REVENUES were \$998 million compared with \$890 million in 1965. After deducting "cost of sales and operating expenses" there remained \$329 million of gross profit before depreciation compared with \$301 million in 1965.



INCOME TAX provision on earnings of the consolidated companies was \$62.9 million, compared with \$60.3 million in 1965.

CASH GENERATION consisting of net income, depreciation, and deferred taxes was \$161 million or \$5.17 per share compared with \$137 million or \$4.40 per share in 1965. Cash generation was further augmented by a gain of \$12 million on the sale of copper conductor.

COMMON DIVIDEND payments were at a quarterly rate of U.S. 22.5 cents per share for the first three quarters of 1966 but in the fourth quarter were increased to U.S. 25 cents per share. Total common dividend disbursements, expressed in Canadian dollars, were \$31.0 million representing an average of \$1.00 per share, compared with \$27.6 million in 1965, an average of 89 cents per share.

PLANT AND INVESTMENT outlays were \$122 million.

#### *Sales and Prices*

We estimate that free world consumption of aluminum in all forms grew by an estimated 12 percent in 1966. This was the fifth consecutive year in which world consumption increased by more than 9 percent — well above the historic trend line of about 7 percent per annum. As a consequence, the problem of surplus smelter capacity disappeared in 1966 and balance between supply and demand in primary aluminum reappeared after many years of imbalance. In this climate Alcan's consolidated sales tonnage reached new highs. The year's record shipments by Alcan were, however, only achieved through heavy purchases of metal from the U.S. Government stockpile and other sources at prices which permitted no profit on re-sale and through a substantial reduction of ingot inventories (Chart IX). Hopefully in

1967 the planned larger output of "full profit" metal from Alcan's own smelters will supplant some of the metal purchases made in 1966, and realized prices should increase somewhat as a result of the price change which occurred in North America in January 1967.

#### *Primary Production*

Total primary aluminum produced by all the companies associated with Alcan, including the production of non-consolidated affiliates and ingot received in exchange for alumina, amounted to 1,136,000 tons in 1966.

The Alcan smelters in Canada produced 788,500 tons of aluminum, with the output rising from an annual rate of 770,000 tons early in 1966 to a rate of 847,000 tons by the end of the year. The increase arose from a new potline of 24,000 tons per annum capacity brought into service at Kitimat in May, and from additional capacity derived from the modernization of some of the Company's older smelters in Quebec and British Columbia. Further increases in Canadian smelter capacity will be available in 1967.

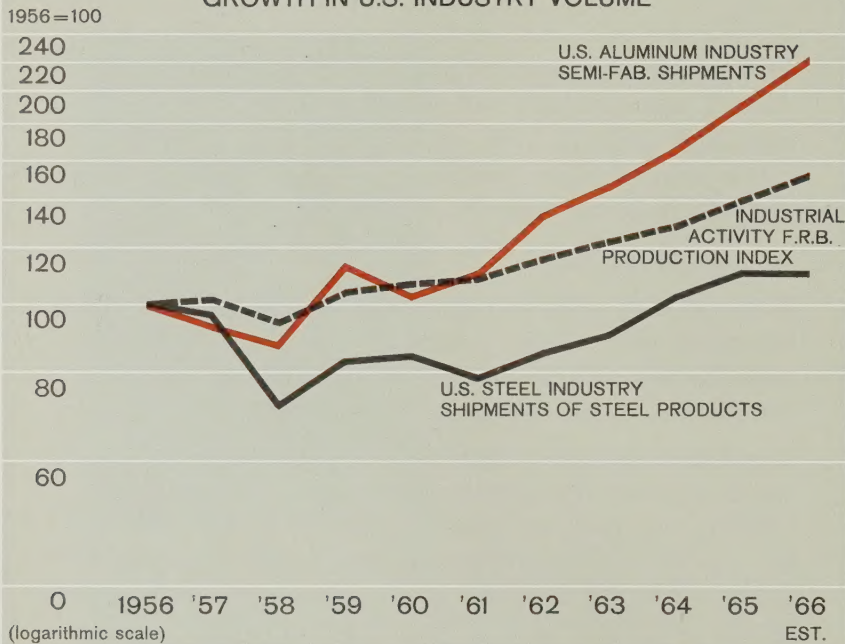
#### *Norwegian Partnership*

Anticipating Alcan's growing requirements of metal supplies on a more diversified basis, in December agreement was reached between Alcan and the Kingdom of Norway whereby Alcan became, on 17 January 1967, a 50 percent participant in A/S Ardal og Sunndal Verk (ASV). The agreement provided that in exchange for 50 percent of the shares of ASV, the Kingdom of Norway would receive from Alcan 1,100,000 common shares of Alcan Aluminium Limited and, in addition, U.S. \$4 million of 6 percent promissory notes due in five equal annual installments.

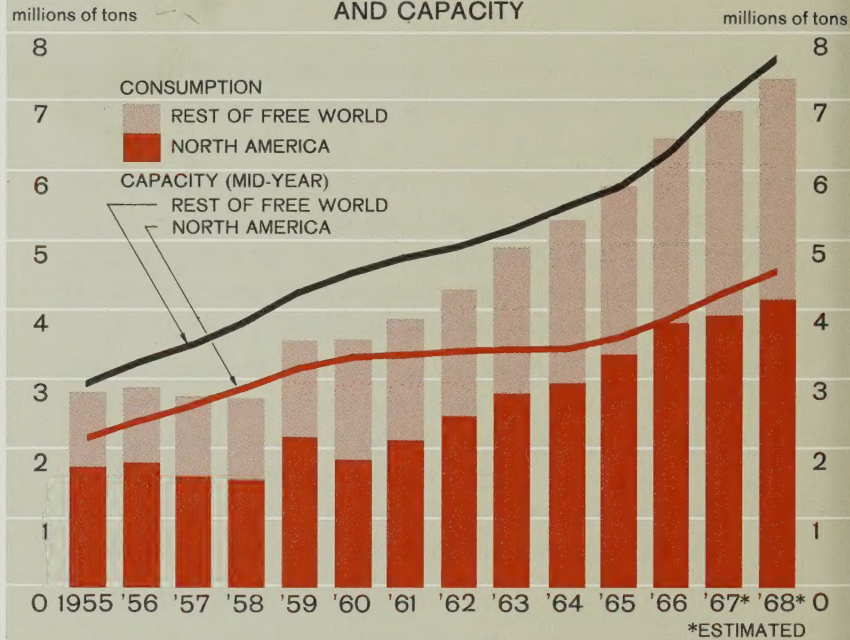
ASV owns two smelters with a total capacity of some



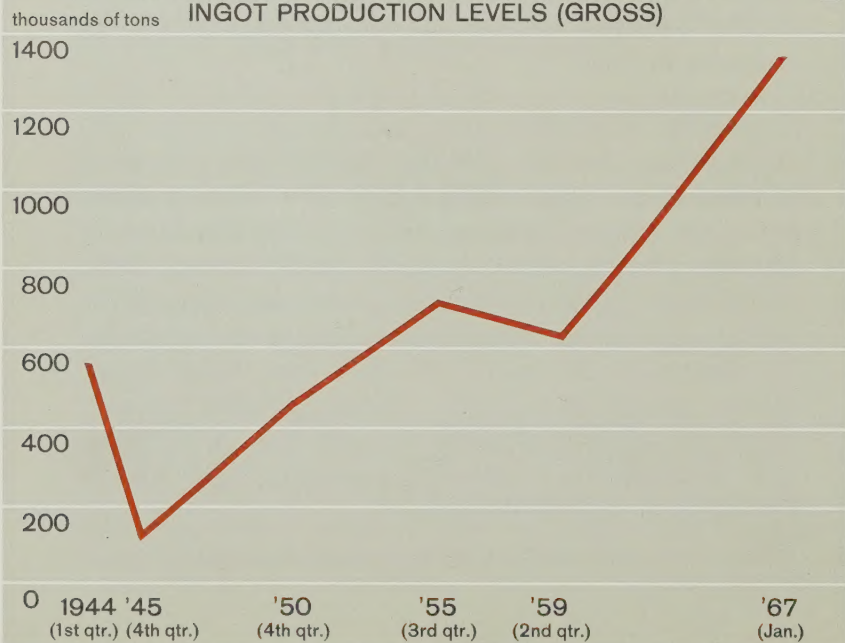
### GROWTH IN U.S. INDUSTRY VOLUME



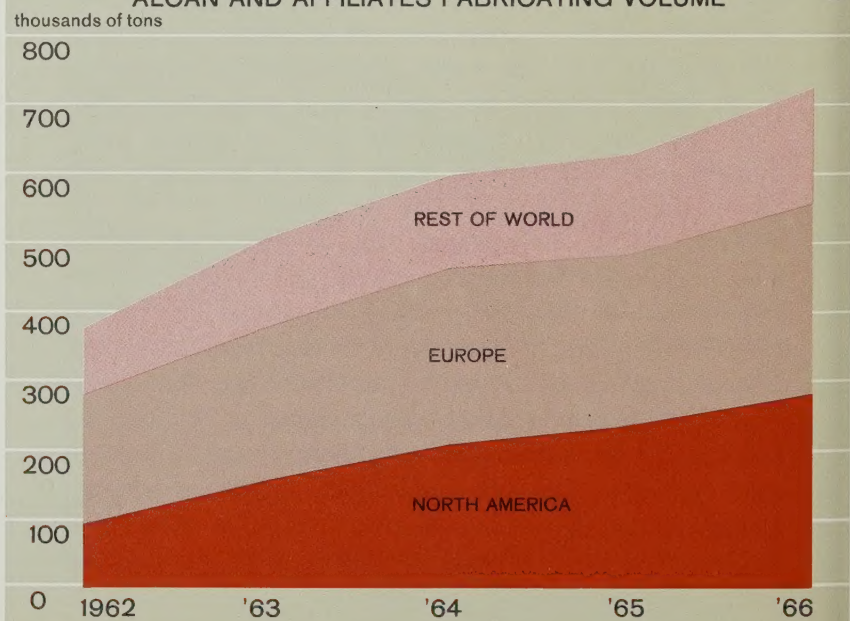
### FREE WORLD PRIMARY ALUMINUM USAGE AND CAPACITY



### ALCAN AND AFFILIATES HISTORIC RANGE OF INGOT PRODUCTION LEVELS (GROSS)



### ALCAN AND AFFILIATES FABRICATING VOLUME





185,000 tons per annum, and has another 50,000 tons per annum of capacity under construction. This company also owns hydroelectric power for a large part of its smelter requirements.

On the basis of ASV's net income in 1965 and 1966, no dilution in the earnings of Alcan shares is expected as a result of this exchange of shares and earning power.

#### *Fabricating*

The total volume of sales of semi-fabricated and finished products, by all the companies associated with Alcan (consolidated and non-consolidated) was 724,000 tons, an increase of approximately 15 percent over 1965. Consolidated sales of such products were 554,100 tons.

During 1966 excellent progress was made on the construction of the 200,000-ton per annum hot rolling mill at Norf, in West Germany, by Aluminium Norf G.m.b.H., the joint fabricating enterprise of Vereinigte Aluminium-Werke A.G. and Alcan.

Although the Company's fabricating operations in the United States in sheet, cable, powder and forgings have only been part of the Alcan group for a few years, they already constitute the Company's largest single area of semi-fabricated sales. These companies showed good volume growth in 1966 and jointly contributed to improvement in consolidated earnings, in addition to providing a market for more than 150,000 tons of ingot. Alcan's fabricating activities in Canada also showed gains in volume and profitability in 1966.

The price level for many semi-fabricated products is still unsatisfactory in such major markets as the United States, the United Kingdom and Germany, although in the U.S., our realizations on sheet and cable products showed some improvement over 1965.

#### *Earnings and Finance*

As indicated earlier, the higher level of earnings in 1966 resulted mainly from the larger sales tonnage and a modest improvement in yields. Certain other factors, however, had an adverse effect on consolidated profits. The 36.5 percent devaluation of the Indian rupee in 1966 had an adverse impact of about 8 cents per share. In 1966, Indian Aluminium Company, Limited suffered production cutbacks as a result of an unusually severe drought and power shortage and this situation still prevails in 1967.

In Canada, Alcan's smelter expansion and modernization program caused operating disruptions with a consequent temporary increase in operating costs. These operating costs are returning gradually to more normal levels.

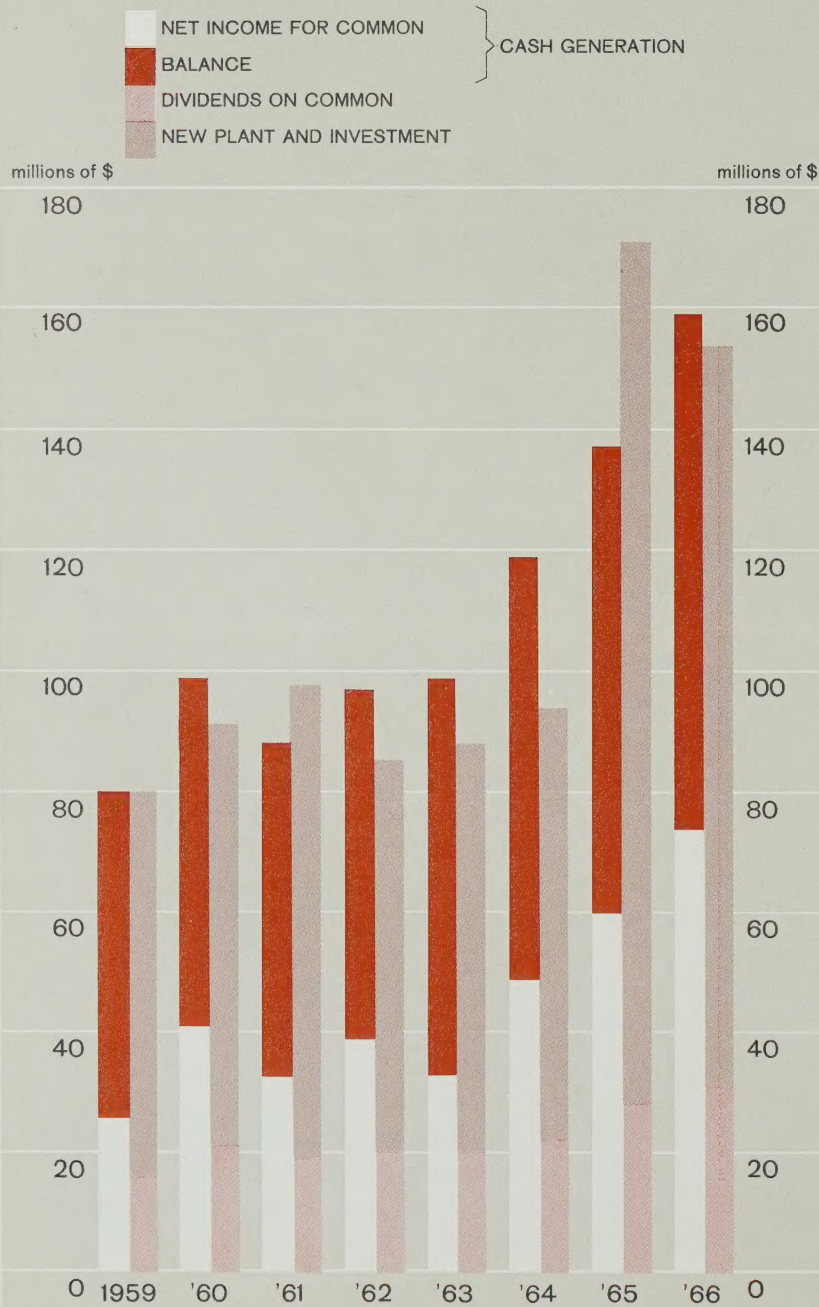
The Company's selling, research and administrative expenses increased approximately 13.5 percent in 1966. Part of this increase is the inevitable result of enlarging the Company's activities in the fabricating field where overhead expenses are necessarily higher than in the primary field. Also the distressing impact of inflation had a significant effect on these and other expenses in 1966 — and will continue to burden the Company in the current year. Despite persistent efforts to contain these forces, the Company's costs of doing business are increasing. This trend is a matter of continuing concern despite the fact that, as a percentage of sales, the increase has been modest.

Some progress has been made in improving earnings at the fabricating level — but there are still areas, such as Germany, where losses continue on a sizeable scale. The target of improved fabricating earnings remains high on the priority list for the Company to achieve satisfactory returns on its investments.



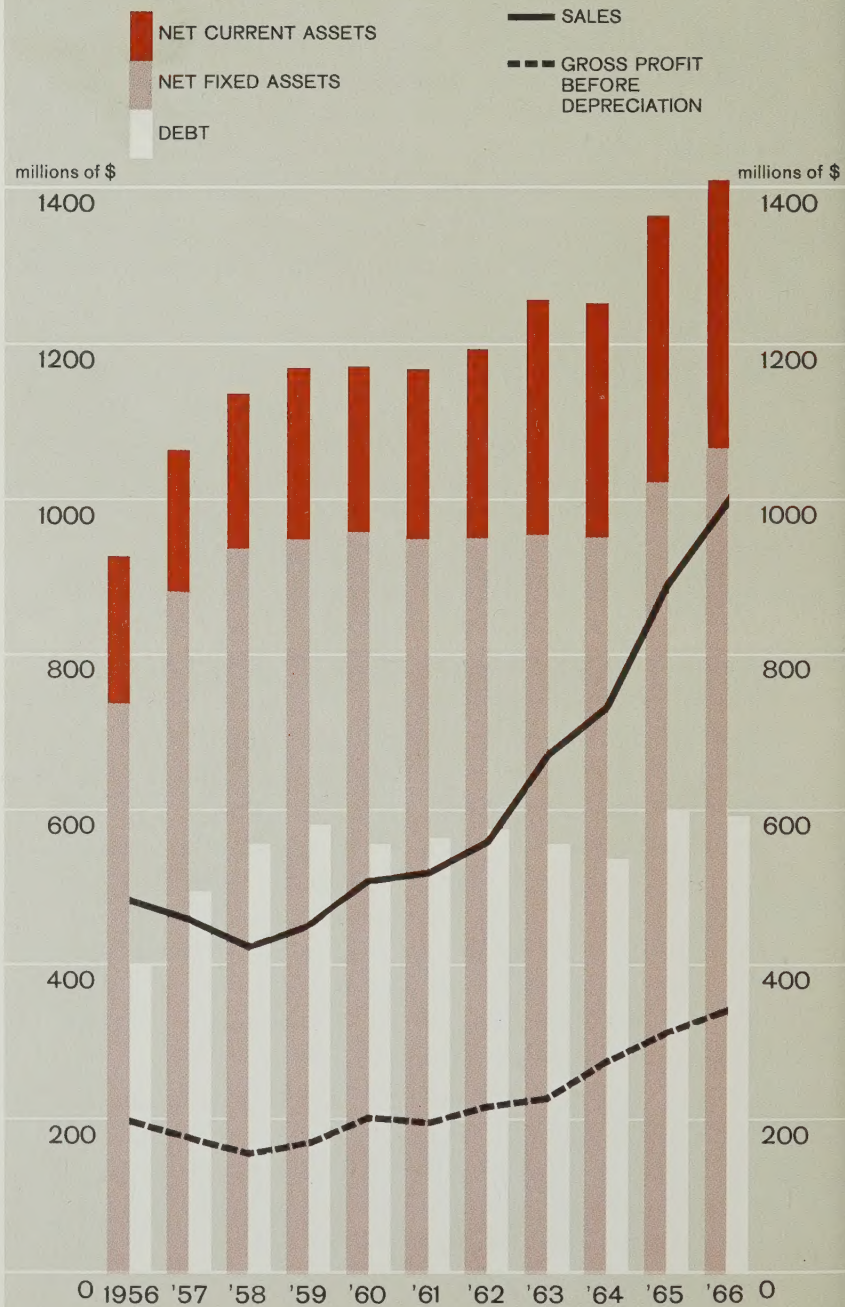
# ALCAN CONSOLIDATED

V



# ALCAN CONSOLIDATED

VI





On the favorable side, a capital gain of \$12 million was derived from the sale of large copper bus conductors which were replaced by aluminum in the process of raising the capacity of certain older Alcan smelters in Canada. In view of the size and extraordinary nature of this gain, the amount was taken directly into surplus account.

Interest charges on long-term debt in 1966 were slightly lower than in the preceding year. As some of the Company's basic investments have been under-utilized during the past several years, it has been possible to increase production and expand fabricating facilities without adding to over-all debt. You will note from Chart VI that the Company's debt in December 1966 was approximately the same as in 1959. In 1967 the Company's basic investments are scheduled to be fully utilized and total capital expenditures (including the cost of entering the ASV partnership) are projected at approximately \$220 million. Equity and debt are now in balance and while it is expected that debt will increase moderately in the current year, the present prospect is that this relationship will not be materially altered.

With regard to taxes, the apparent over-all decrease of several percentage points in the effective rate of income tax compared with 1965 does not stem from lower income tax rates, but is almost entirely due to a change in the composition of pre-tax income. The largest single factor causing this change arose from losses of certain subsidiaries in 1965 being carried forward and deducted from taxable income in 1966.

#### *Research and Development*

Research and development activity was maintained at a high level in 1966. There are some 900 scientists, engineers and technicians in Aluminium Laboratories

Limited, the Company's research and engineering organization, with several hundred more engaged in technical and production development at the operating level.

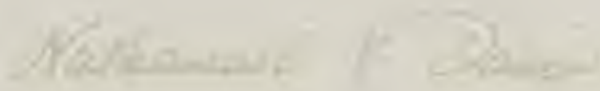
The serious stress corrosion difficulties, which were encountered in late 1965, and which caused major delays in the program for commercial demonstration of the monochloride direct-reduction-process, were resolved through intensive experimental and engineering study. Protective measures have been developed, and their application to the major refinery vessels is in progress. Several other serious obstacles appear to have been overcome, but problems remain to be solved and will require time-consuming experimental work.

#### *Personnel*

In September Edwin J. Mejia retired as a director of the Company under the Directors' retirement program. Mr. Mejia, with 45 years of dedicated service to the Company, becomes Alcan's first honorary director and will, I am pleased to say, continue in a consulting capacity. At the same time the Hon. James Sinclair, P.C. was elected and was welcomed to the Board to fill the vacancy created by Mr. Mejia's retirement.

Personnel at all levels and locations performed in a loyal and energetic manner. On behalf of the directors, it is again my pleasure to pay well-deserved tribute to our colleagues near and far.

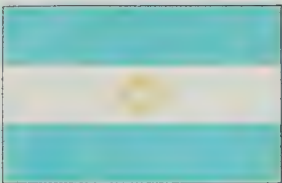
Respectfully submitted,



Montreal, Canada  
22 February 1967.

President





#### ARGENTINA

*Alcan Argentina S.A.I.C., with sheet, foil and extrusion facilities near Buenos Aires, makes a full contribution to the service and development of aluminum markets in Argentina.*



#### AUSTRALIA

*Alcan Australia Limited is the largest aluminum fabricator in Australia and Alcan owns 20 percent of a large alumina plant soon to be completed. Upon completion of its own smelter in 1969, Alcan Australia Limited will be an integrated operation.*

## Review of the Year 1966

### Operations

#### *Fabricating*

The forward momentum of the Company's expansion of its fabricating capacity was sustained in 1966. Total shipments to third parties from the fabricating plants of companies in which Alcan has an interest, including those of all the important non-consolidated fabricating companies, were 724,000 tons compared with 633,000 tons in 1965. (See Chart IV.)

The main developments in the fabricating field in 1966 occurred in 14 countries as set out below. A number of the Company's smaller fabricating plants, notably those in Belgium, Colombia, Malaya, and Uruguay, made encouraging improvements in their contributions to consolidated earnings.

CANADA — To keep pace with the growing demand for electrical conductors, Aluminum Company of Canada, Ltd is expanding the cable capacity of its Vancouver Works, increasing the capacity of its rod mill at Arvida, and planning the construction of a new cable plant at Stephenville in Newfoundland. In June, the company purchased the new 3,500-ton extrusion plant of Simalex Aluminum Company Limited at Laval in the Province of Quebec.

To achieve an identity for the company's sales in the residential building market, Alcan Building Products Limited was formed to encompass the activities of Roslyn Metal Products Limited in Toronto, Almetco Manufacturing Corporation Limited in Vancouver, and the company's Siding Division branches in Toronto and Montreal. Alcan Design Homes Limited, a homebuilding subsidiary and a means of demonstrating the best uses

for aluminum in housing, built and delivered some 500 detached homes, in the \$25-35,000 range, in Vancouver, Calgary, Edmonton, Toronto and Montreal. In January, 1967, Alcan Design Homes Limited made plans to produce a new type of factory-assembled house, in the \$10,000 price range. A factory is scheduled for production in late 1967 with an initial capacity of 100 homes a month.

Towards the end of 1966, Aluminum Company of Canada, Ltd with two minority partners, formed Alcan Pipe Limited, which will build a plant at Vernon, British Columbia, to produce pipes and tubing. The new company is expected to contribute substantially to the enlargement of the market for Alcan aluminum in the field of irrigation.

Aluminum Goods Limited increased from 39 to 99 percent its ownership of Metcan Products Limited (formerly Metal Closures (Canada) Limited), a producer of collapsible tubes and closures for containers, in Toronto, and is undertaking extensive modification and modernization of the plant facilities.

U.S.A. — Alcan Cable Corporation expanded its cable capacity by 7,500 tons per annum during the year. Construction of an additional rod and cable plant near Sacramento, in California, is scheduled for completion early in 1968. At that time, the company's annual capacity to produce rod and cable will be 90,000 tons and 53,000 tons respectively.

Alcan Metal Powders, Inc. (formerly Metals Disintegrating Corporation) increased its powder capacity by some 15,000 tons per annum.

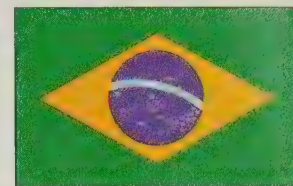
Alcan Aluminum Corporation continued with the consolidation and reorganization of its fabricating facilities and undertook some plant modernization and extension,



*BELGIUM*  
*Alcan Aluminium Raeren S.A., with an extrusion plant at Raeren on the Belgo-German border, is well placed to serve Belgian industry and the European Common Market.*



*BRAZIL*  
*Alcan Alumínio do Brasil S.A., is the largest aluminum fabricator in Brazil and obtains much of its primary aluminum from a smelter operated by a subsidiary in Minas Gerais.*



including a new painted sheet line at Warren, Ohio, during the year. Consideration is being given to extensive additions to some of its plant capacities.

#### *Latin America*

**BRAZIL** — Alcan Alumínio do Brasil S.A. (formerly Alumínio do Brasil S.A.) is undertaking the construction of a new 5,000-ton cable plant at Recife, for production in mid-1967.

#### *Europe*

**DENMARK** — Aluminord A.S. brought an extrusion press into operation in Copenhagen in mid-1966, and is planning to enlarge its foil rolling and converting facilities. Also in Copenhagen, Dansk Aluminium Industri A.S. is expanding its manufacture of utensils.

**GERMANY** — Alcan Aluminiumwerke G.m.b.H. brought an extrusion press into operation at its Uphusen plant, expanded the casting facilities at its Nürnberg plant, and made progress with the expansion of its sheet rolling plant at Göttingen. Aluminium Norf G.m.b.H., jointly owned by Vereinigte Aluminium-Werke A.G. and Alcan, proceeded with the construction of the 200,000-ton rolling mill at Norf, for completion in the first half of 1968. The same jointly-owned company brought its new 20,000-ton rod and cable plant into operation at Lunen at the end of 1966.

**NORWAY** — As part of an overall agreement concluded between Alcan and the Norwegian Government, Alcan transferred to A/S Ardal og Sunndal Verk, in January, 1967, its 50 percent interest in A/S Nordisk Aluminium-industri. (See also page 15.)

**SPAIN** — Alcan Alumínio Iberico S.A. completed the expansion of its sheet rolling facilities at Alicante in 1966,

attaining a total capacity of 28,000 tons per annum. Modernization and expansion of the extrusion facilities are in progress and a new foil plant is planned.

**SWEDEN** — A. B. Svenska Metallverken, an affiliate, is embarking on a 30,000-ton expansion of its sheet rolling facilities at Finspong, and on a 3,000-ton increase in its extrusion capacity at Skultuna, for completion in 1968.

**UNITED KINGDOM** — Alcan Industries Limited continued with the modernization of its extrusion facilities at the Rogerstone and Banbury plants. An additional extrusion press was brought into production at Banbury, and annual rod capacity at the Birmingham plant was increased by 25,000 tons. At Rogerstone, some temporary disruption of deliveries has resulted from the considerable reduction in the operating personnel effected as part of re-organization still in progress at this plant. Alcan Foils Limited (formerly Fisher's Foils Limited) is proceeding with the modernization and regrouping of its foil-rolling and finishing facilities at Wembley.

#### *Africa*

**NIGERIA** — Alcan Aluminium of Nigeria is planning to reinforce the capacity of its rolling mill at Port Harcourt, to provide for the production of wider sheet.

**SOUTH AFRICA** — Alcan Aluminium of South Africa Limited is embarking, at Pietermaritzburg, on the expansion of its sheet-rolling and foil capacity and the modernization of its extrusion facilities. Completion of this program in 1968 will result in an overall annual capacity to produce sheet, extrusions and foil of 32,000 tons.

#### *Asia*

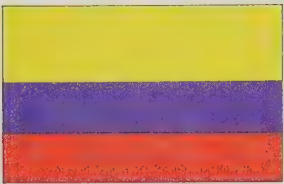
**INDIA** — Indian Aluminium Company, Limited, brought the new rod plant at Alupuram into production in 1966. Design work and planning continues on the sheet plant





#### CANADA

*Aluminum Company of Canada, Ltd, Alcan's principal subsidiary, is the leading supplier of primary aluminum to world markets. It operates five smelters, including the world's two largest, and fabricating plants from coast to coast in Canada.*



#### COLOMBIA

*Aluminio Alcan de Colombia, S.A., operates one of Latin America's most modern aluminum fabricating plants, near Cali, producing sheet and extrusions, including pipe for the petroleum industry and irrigation.*

planned in connection with the integrated expansion program on the West Coast (see "Smelting", India, page 15).

**JAPAN** — Toyo Aluminium KK made good progress with the program to increase its Alpaste and foil conversion capacity, and on the modernization of the foil mills at its plant near Osaka. Three subsidiaries of the Nippon Light Metal Company expanded their fabricating facilities during the year. Osaka Aluminium Company, Limited installed an additional 1,650-ton extrusion press in its plant at Osaka. Nikkei Aluminium Company, Ltd also added a new 1,650-ton extrusion press, and is undertaking a major expansion of its window fabrication plant in the Tokyo area. Nikkei Aluminium Rolling Company, Limited augmented the strip rolling capacity at its Nagoya plant.

#### Oceania

**AUSTRALIA** — Alcan Australia Limited (formerly Australian Aluminium Company, Limited) continued with its program for the modernization and enlargement of its sheet and extrusion equipment. An extrusion press is being installed at Brisbane in Queensland for production in mid-1967.

#### Smelting

##### Canada

Aluminum Company of Canada, Ltd produced 788,500 tons of primary aluminum in 1966, compared with 728,400 tons in 1965, 740,400 tons in 1964, 625,600 tons in 1963. The program of modernization of potlines proceeded vigorously at all the Canadian smelters and a 24,000-ton addition to the capacity at Kitimat came into production in May. At the same time, supporting facilities, including casting, were expanded and improved. Construction of a

further 24,000-ton addition to the capacity of Kitimat, started during the year, is due for completion in the first half of 1967. The Kitimat smelter will then be utilizing 85 percent of the power developed at Kemano.

At the beginning of the year, the Canadian smelters were producing at the rate of 770,000 tons per annum, and at year end, at the rate of 847,000 tons per annum, reflecting the progress of the modernization program and the new capacity brought into production at Kitimat. Throughout the year, smelter operation was close to the capacity levels of the facilities immediately available for production.

In 1967, it is estimated that the Company's Canadian production will amount to 925,000 tons, brought about by the additional capacity coming into production at Kitimat, and the continuation of the program of modernization at the smelters in Quebec. By the end of 1967, the smelter operating rate is expected to be 955,000 tons per annum.

Aluminum Company of Canada, Ltd continued to enjoy satisfactory industrial relations with its employees at all locations during the year. A new two-year labour contract, running until June 1968, was negotiated at the Kitimat smelter. Agreement was reached whereby the existing three-year labour contracts at all the smelters in the Province of Quebec were extended by one-year until December 1968.

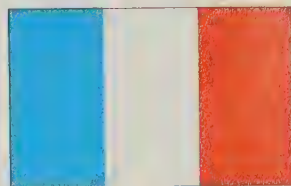
*At the head of the spectacular Sunndalsfjord on the west coast of Norway is the new town of Sunndal where an aluminum smelter at waters-edge has been built in recent years. Now capable of producing 60,000 tons of aluminum ingot per annum, this smelter's capacity is being expanded to reach over 110,000 tons by 1968. It is one of the two main plants of A/S Ardal og Sunndal Verk in which Alcan has recently become a 50% partner.*



*DENMARK*  
*Alcan serves the Danish aluminum consumer through participation in two fabricating affiliates — Aluminord A.S. and Dansk Aluminium Industri S.A. — both located in Copenhagen.*



*FRANCE*  
*Aluminium Alcan de France operates a modern extrusion plant near Chartres and an alpaste plant at Bedous. S.A. des Bauxites et Alumines de Provence mines bauxite in Southern France.*







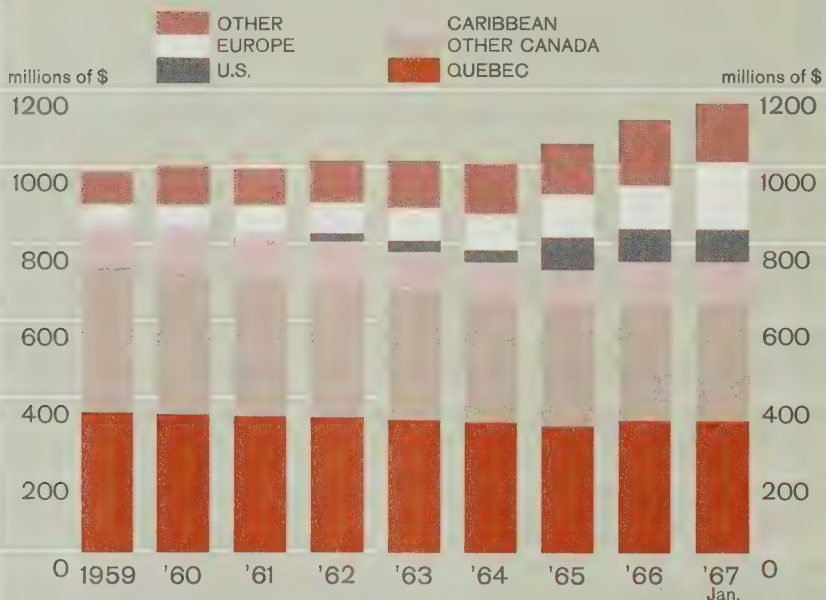
**GERMANY**  
 Alcan Aluminiumwerke G.m.b.H., is an important fabricator serving the German aluminum market. Aluminium Norf G.m.b.H., a 50 percent-owned company, will complete a 200,000-ton hot rolling mill — the largest in Europe — in 1968.



**GHANA**  
 Alcan serves the growing aluminum market in Ghana through Ghana Aluminium Products Limited. A pioneer of aluminum fabricating in Ghana, it forms aluminum building sheet and related products, at Tema.

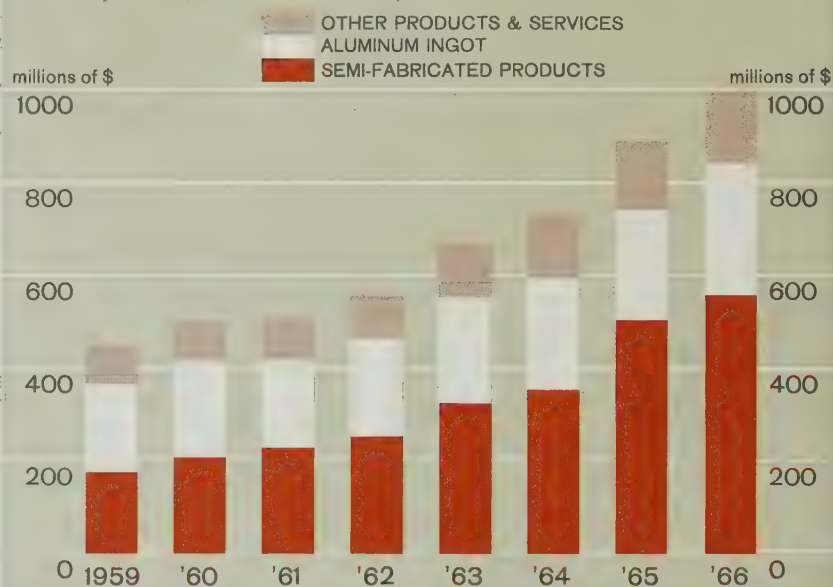
**ALCAN AND AFFILIATES—BOOK VALUE OF NET PLANT (ALCAN SHARE)**

VII



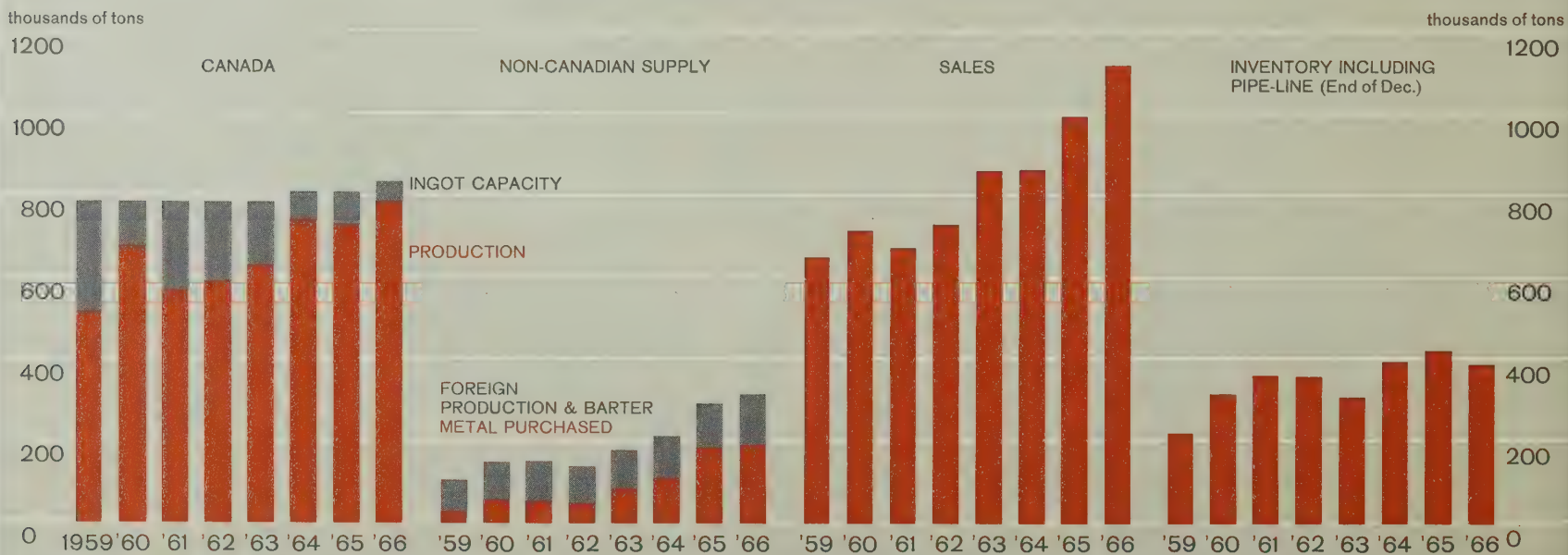
**ALCAN CONSOLIDATED SALES**

VIII



**ALCAN CONSOLIDATED—METAL POSITION**

IX

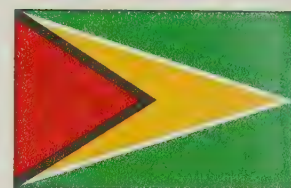




*GREAT BRITAIN*  
*Alcan, from its first British sales office opened in 1909 and its first fabricating plant built 40 years ago, has grown in the United Kingdom to a network of ten plants of fully-owned and affiliated companies. Alcan Industries Limited is the principal fabricating subsidiary.*



*GUYANA*  
*One of Alcan's oldest subsidiaries, Demerara Bauxite Company, Limited, observed its 50th anniversary in 1966. An important supplier of bauxite and alumina to Alcan, it also sells calcined bauxite to world markets.*



### *Other Countries*

Alcan's smelting subsidiaries and affiliates outside Canada continued to operate at their maximum rates except for Indian Aluminium Company, Limited, which suffered curtailment of production because of rainfall and power shortage. Together they produced a total of 286,000 tons, compared with 269,000 tons in 1965. The rated capacity of these smelters at year end was 304,000 tons per annum compared with 290,000 tons at the end of 1965.

**BRAZIL** — Aluminio Minas Gerais S.A., a subsidiary, operated at full capacity and raised its capacity by 1,500 tons per annum during the year. When a further 1,200-ton expansion in the capacity of the Saramenha smelter is completed in mid-1967, the total annual smelter capacity will be 19,700 tons.

**INDIA** — Indian Aluminium Company, Limited, a subsidiary, completed the second half of its 11,000-ton expansion of the Alupuram smelter during the year, bringing its total smelter capacity, at Hirakud and Alupuram, to 42,000 tons per annum. However, the start-up of the completed extension of the Alupuram smelter was delayed by power shortages, which also caused, for a period, the shutdown of most of the existing facilities at this site. Metal production was also restricted at the Hirakud smelter due to power shortages arising from abnormally low rainfall during the year. Work continued on the engineering for a new integrated bauxite, alumina, smelter and fabricating development on the West Coast planned to add a further 33,000 tons to the company's annual smelter capacity. Construction is expected to be under way in the next few months.

**JAPAN** — The Nippon Light Metal Company, a 50 percent-owned company, continued the flexible expansion pro-

gram at its smelters at Kambara and Niigata which is expected to result in a total capacity at these smelters of 181,000 tons per annum in the first half of 1968.

**NORWAY** — In January 1967, an agreement was completed between the Norwegian Government and Alcan, whereby Alcan became a 50 percent participant in A/S Ardal og Sunndal Verk (ASV), of which the Norwegian State had previously been the sole shareholder. ASV owns two aluminum smelters with a total capacity of about 185,000 tons per annum, and has 50,000 tons of additional capacity under construction. As part of the overall agreement Alcan has transferred to ASV its 50 percent interest in A/S Norsk Aluminium Company. In 1966, A/S Norsk Aluminium Company produced at the full capacity of its 32,000-ton smelter at Hoyanger.

Also in Norway, Det Norske Nitridaktieselskap, another 50 percent-owned company, is planning to modernize its smelter facilities and increase the capacity to 38,000 tons per annum. The 100,000 k.w. No. 2 Tysse power station, in which that company has a 57 percent interest, will be completed early in 1967.

**SWEDEN** — A/B Svenska Metallverken, an affiliate, began construction of a 22,000-ton addition to the capacity of its Sundsvall smelter. The completion of this expansion in the second half of 1967 will bring the smelter capacity to 55,000 tons per annum.

**AUSTRALIA** — Alcan Australia Limited (formerly Australian Aluminium Company, Limited), a fully-owned fabricating subsidiary, will begin in 1967 the construction of a smelter at Kurri Kurri, near Newcastle in New South Wales, with an initial planned capacity of 40,000 tons per annum, of which at least 30,000 tons will come into production in 1969 (see also under "Raw Materials", Australia, page 18).





#### INDIA

*Indian Aluminium Company, Limited played a pioneer role in establishing the Indian aluminum industry. A leading Indian enterprise, it conducts an integrated, expanding operation from bauxite mining through smelting to finished products.*



#### IRELAND

*Alcan's affiliate in Eire, Unidare Limited, manufactures a wide range of aluminum and other products at its plant near Dublin, both for the domestic market and for export.*

### *Hydro-Electric Power*

Operated at capacity levels during 1966, the power facilities in the Saguenay region of Quebec were able to supply the primary power requirements of the Company's smelters and third party customers and, in addition, an appreciable amount of interruptible or secondary power for sale. In British Columbia, work progressed on the installation of an eighth 112,000 k.w. generator at the powerhouse at Kemano to serve the Kitimat smelter. This additional unit began operation early in 1967. The power facilities at Kemano were operated at 80 percent of capacity during the year.

Total power sales in Canada, including both primary and interruptible power, amounted to \$22.3 million, compared with \$22.8 million in 1965.

### *Raw Materials*

GUYANA — Demerara Bauxite Company, Limited produced 2,400,000 tons of bauxite of all grades and 324,000 tons of alumina. There were some disruptions of operations during the year caused by wildcat strikes, but annual production was at a higher rate than in 1965, reflecting a generally more satisfactory operating environment and the reinforcement of mining equipment undertaken in 1965. The collective labour contract is due for renegotiation in May, 1967.

JAMAICA — Alcan Jamaica Limited produced a total of 887,000 tons of alumina. Expansion at both the Kirkvine and Ewarton plants will raise the company's total annual alumina capacity to 1,200,000 tons in 1968. A new collective labour contract was negotiated early in 1966, to run until 31 July 1968.

FRANCE — Société Anonyme des Bauxites et Alumines de Provence produced 454,000 tons of bauxite in 1966.

MALAYA — Southeast Asia Bauxites Limited produced 748,000 tons of bauxite during the year.

GUINEA — In October, Alcan undertook to acquire an interest in bauxite development in the Republic of Guinea by purchasing a 17.5 percent interest in Halco (Mining) Inc., a subsidiary of Harvey Aluminum (Incorporated). Halco has an agreement with the Republic of Guinea providing for the development of the Boké bauxite deposits through Compagnie des Bauxites de Guinée, a mining company owned 51 percent by Halco and 49 percent by the Government of Guinea. The current plan calls for the Government of Guinea to undertake the financing and construction of the port and railway facilities rather than the mining company, and does not include an alumina plant. Alcan has contracted to purchase from the mining company a quantity of 1.2 million metric tons of bauxite per annum for the first 5 years of production, and 1.4 million tons for the next 15 years. First shipments are tentatively foreseen for 1971. In addition to Alcan, aluminum producers in the U.S., France, Germany and Italy have undertaken to acquire minority interests in Halco totalling 31½ percent. The participants in Halco have in total contracted to purchase approximately 5 million tons of bauxite per annum from the mining company, over a 20-year period from the beginning of mining operations.

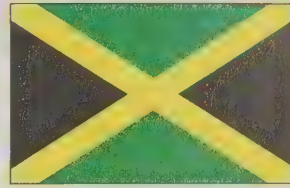
*The main mill building of Aluminium Norf in West Germany, here shown under construction, will be one-third mile long, to house a hot mill capable of producing reroll coils of up to 15 tons in weight and up to 110 inches in width. Initial hot rolling capacity of the mill in 1968 will be 200,000 tons per annum, capable of further expansion. Alcan is a 50% partner in the project. RIGHT, the flag of India is raised at Kalwa outside the new foil mill which Indian Aluminium Company, Limited has brought into production.*



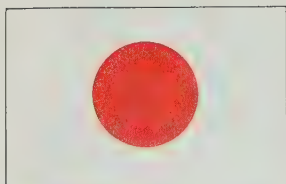
ITALY  
*Alcan Alluminio Italiano S.p.A., has operated a small-scale smelter for 40 years. An Alcan affiliate, Angeletti & Ciucani Fonderia Laminatoio S.p.A., is one of the principal aluminum fabricators in Italy.*



JAMAICA  
*Alcan Jamaica Limited, a pioneer of both the bauxite and alumina industries in Jamaica, is a leading international supplier of alumina and a major and expanding factor in the Jamaica economy.*

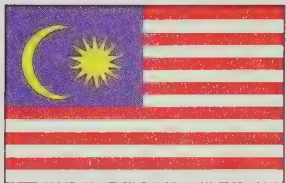






#### JAPAN

*Alcan participates in the important Japanese aluminum industry through its 50 percent partnership in Nippon Light Metal Company, Ltd, the largest domestic producer, and through a 50 percent interest in Toyo Aluminium KK, a leading producer of foil.*



#### MALAYSIA

*Alcan Malayan Aluminium Limited, with a rolling mill near Kuala Lumpur, links Alcan's Canadian aluminum ingot resources with the Malaysian market. Another subsidiary, Southeast Asia Bauxites Limited, mines bauxite in Johore for use in Canadian refineries.*

**AUSTRALIA** — Queensland Alumina Limited made satisfactory progress with the construction of the 672,000-ton alumina plant at Gladstone in Queensland. Alcan has a 20 percent participation in this project which is due for completion in April, 1967.

#### Markets and Sales

In 1966, free world consumption increased by approximately 12 percent, thereby continuing the vigorous rate of growth in recent years (see Chart II). This was stimulated by the continuation of the high level of economic activity in North America. Free world primary production increased by about 9 percent over 1965, while production capacity rose by some 10 percent. Supply, augmented by tonnages available from the U.S. stockpile, and demand, were in very close balance during the year.

Estimated free world consumption in 1966 was 8,100,000 tons, made up of 6,450,000 tons of primary aluminum and 1,650,000 tons of secondary ingot and scrap, compared with 7,200,000 tons in 1965. Free world primary production in 1966 was approximately 6,150,000 tons compared with 5,650,000 tons in 1965 and 5,290,000 tons in 1964.

Again in 1966, the largest gain in volume of sales took place in the United States, where total domestic consumption rose by over 10 percent. In Canada, consumption is estimated to have risen by more than 15 percent.

In the European Common Market, overall consumption also increased by over 10 percent, although in Germany the market weakened in the second half of the year. In Spain, consumption was maintained at a high level. In the United Kingdom, consumption again showed a slight gain despite the effects of the Government program for the solution of the balance of payments problem and for the deflation of the domestic economy.

#### Alcan Aluminium Limited Geographical Distribution of Consolidated Sales of Aluminum

	In short tons				
	1962	1963	1964	1965	1966
Canada . . . . .	83,200	93,800	100,800	116,100	137,100
United States . . . .	211,400	258,000	232,200	339,100	394,800
United Kingdom . . .	133,600	145,700	174,100	163,000	159,800
All Others . . . . .	301,500	364,100	355,400	374,900	423,800
<b>TOTAL . . . . .</b>	<b>729,700</b>	<b>861,600</b>	<b>862,500</b>	<b>993,100</b>	<b>1,115,500</b>

In Japan, aluminum consumption rose sharply, by more than 25 percent, over the levels of 1964 and 1965, against a background of a strong new upsurge in the rate of economic activity during the year.

In India, consumption continued to rise, reflecting the increase in demand created by the Government's large-scale electrification program and an increase in domestic production. Imports of aluminum continued under the aid programs of Canada, the United States and other countries.

In Australia, consumption levelled off after a steady upward trend since 1962.

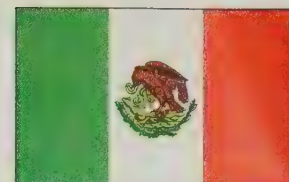
In Latin America, there was a marked increase in the amount of aluminum consumed in the overall area, with a levelling off in consumption apparent in some individual countries.

The trend towards a better basic balance between supply and demand at the primary level was maintained during the year, with the U.S. stockpile effectively providing the extra aluminum requirements for military purposes in Viet Nam.

Throughout 1966, the posted prices for aluminum remained at Can. 26 cents a pound in Canada, and U.S.



MEXICO  
Alcan pioneered the development of the aluminum market through Aluminio Industrial Mexicano, S.A., which has a fabricating plant near Mexico City, producing sheet, extrusions and foil.



NETHERLANDS  
Alcan participates in the Dutch aluminum industry through an affiliate, N.V. Nederlandsche Aluminium Maatschappij, conducting a long established fabricating operation at Utrecht.



# **Alcan Aluminium Limited and Subsidiary Companies Analysis of Consolidated Sales**

	Ingot and Ingot Products		Fabricated Products	
	Tons	\$'000	Tons	\$'000
1961 . . . . .	429,514	193,161	241,606	226,585
1962 . . . . .	470,419	212,047	259,253	250,284
1963 . . . . .	530,854	233,185	330,700	326,037
1964 . . . . .	507,966	236,872	354,580	358,115
1965 . . . . .	503,533	243,475	489,582	496,938
1966 . . . . .	561,399	273,115	554,072	565,435
	All Other Products	Operating Revenues	Totals	
	\$'000	\$'000	Tons	\$'000
1961 . . . . .	40,465	56,720	671,120	516,931
1962 . . . . .	41,237	55,407	729,672	558,975
1963 . . . . .	53,543	57,044	861,554	669,809
1964 . . . . .	67,438	65,125	862,546	727,550
1965 . . . . .	80,987	68,917	993,115	890,317
1966 . . . . .	90,921	68,799	1,115,471	998,270

24½ cents a pound in the United States. There was some strengthening of ingot prices on the European continent. The trend to firmer prices for semi-fabricated products in the United States, begun in 1965, continued during the year, with some selective increases, reflecting the sustained buoyancy of the market. In Europe, semi-fabricated product prices strengthened in the first half of the year, with some weakening apparent at year end in Germany and the United Kingdom.

Effective 18th January 1967, the posted price for aluminum ingot was increased to Can. 26½ cents a pound in Canada, and to U.S. 25 cents a pound in the United States. Appropriate upward adjustments were made to the prices of semi-fabricated products in both markets. Alcan's world export price for aluminum ingot, applicable

outside North America, remained unchanged at U.S. 24½ cents a pound.

Sales of aluminum by Alcan's consolidated subsidiaries, in all forms, and from all sources, amounted to 1,115,500 tons in 1966 compared with 993,100 tons in 1965 and 862,500 tons in 1964. The 12 percent increase in the total volume of Alcan's sales was thus equal to rate of increase in consumption in free world markets. The Company will continue to strive for a more reasonable return on sales.

Purchases of non-Company metal from third parties increased in 1966, because of higher levels of operation and continuing restrictions on the import of primary aluminum imposed by some countries, and for other local reasons. (See Chart IX.) In particular, the Company purchased 43,600 tons of ingot from the U.S. stockpile to augment its own metal supplies, pending the bringing into operation of increased production capacity at its Canadian smelters, by means of new facilities and modernization of older potlines. These purchases enabled the Company to maintain and strengthen relationships with certain important customers and markets from which the Company should benefit over the longer term.

Consolidated shipments of semi-fabricated and finished products totalled 554,100 tons in 1966 compared with 489,600 tons in 1965.

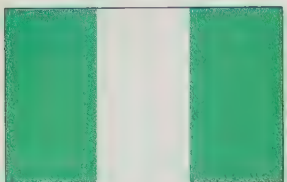
Consolidated sales of ingot products amounted to 561,400 tons compared with 503,500 tons in 1965.

The trend to the increase in the relative proportion of sales of semi-fabricated products should continue as the Company proceeds with its progressive program of forward integration. However, the sale of aluminum ingot to third parties will continue to be an important factor in the Company's overall sales.





**NEW ZEALAND**  
*Alcan constructed the first aluminum rolling mill in New Zealand in 1961, added extrusions and a cable investment and plays a major role in developing aluminum usage in the country.*



**NIGERIA**  
*Alcan Aluminium of Nigeria Limited, operates the first aluminum rolling mill in West Africa, at Port Harcourt, while the adjacent Flag Aluminium Products, Limited, produces aluminum roofing and siding products.*

### Market Surveys

In 1966 Alcan undertook another in its continuing series of world markets surveys to assist in the setting of sales and marketing strategy and in the long-term planning of plant investments. This study of the end-use pattern, present and future, in all significant markets was based on the latest available years 1964 and 1965.

The survey confirmed that on a Free World basis the most important outlet for aluminum is in transportation uses. These include passenger buses, commercial and private vehicles, railway freight and passenger cars, ship construction and aircraft uses. Transportation accounts for nearly one-fourth of all aluminum consumption, while the building and construction industry is next with about one-fifth of total demand. Both of the foregoing broad categories are expected to show strong future growth but will decline slightly in share of the market in the next few years in the face of burgeoning demand for aluminum in electrical and packaging applications.

The end-use pattern varies considerably from area to area. Building applications are the largest outlet in North America, but transportation takes a larger share in Europe, with consumer products and electrical uses holding a larger relative share in the rest of the world.

### Free World Consumption of Aluminum by Major End-Use Markets

(Alcan's 1966 third-party sales breakdown in brackets)

	North America		Europe		Rest of World	
Building . . . . .	26.2%	(32.2)	12.3%	(15.2)	15.7%	(19.3)
Transportation . . . . .	24.4	(17.0)	29.0	(22.9)	15.1	(11.2)
Consumer . . . . .	10.4	(9.1)	11.0	(14.1)	21.8	(17.4)
Electrical . . . . .	13.5	(18.4)	14.1	(13.4)	18.9	(21.5)
Packaging . . . . .	8.6	(6.2)	9.9	(11.2)	8.0	(10.2)
Machinery . . . . .	7.5	(4.6)	9.8	(8.0)	9.8	(4.9)
Other . . . . .	9.4	(12.5)	13.9	(15.2)	10.7	(15.5)
Total . . . . .	100.0	(100.0)	100.0	(100.0)	100.0	(100.0)

### Calcined Bauxite and Chemicals

As in 1965, world-wide demand for calcined bauxite by the abrasive and refractory industries continued unabated and, though the Company's shipments of this product were at the highest possible levels, they were insufficient to fulfill the entire requirement of its customers. The expansion of calcined bauxite production capacity at present underway by Demerara Bauxite Company, Limited will provide for additional supplies in the future.

Shipments of alumina for sale, or under long-term metal barter contracts, continued during the year. Scandinavia again featured as the major customer for this product.

The Company's sales of industrial chemicals showed encouraging further growth in 1966. Demand for special aluminas and aluminum sulphate was especially strong. Progress is being made with the development of new aluminas for the refractory industry in response to demands for better-performing products and improved operating economies by the metallurgical industry. Available capacity was the only limit to sales of aluminum fluoride; major expansion in the Company's capacity to produce this product will be completed early in 1967.

The new plant for the production of liquid aluminum sulphate, which is being built in the Ottawa area, the

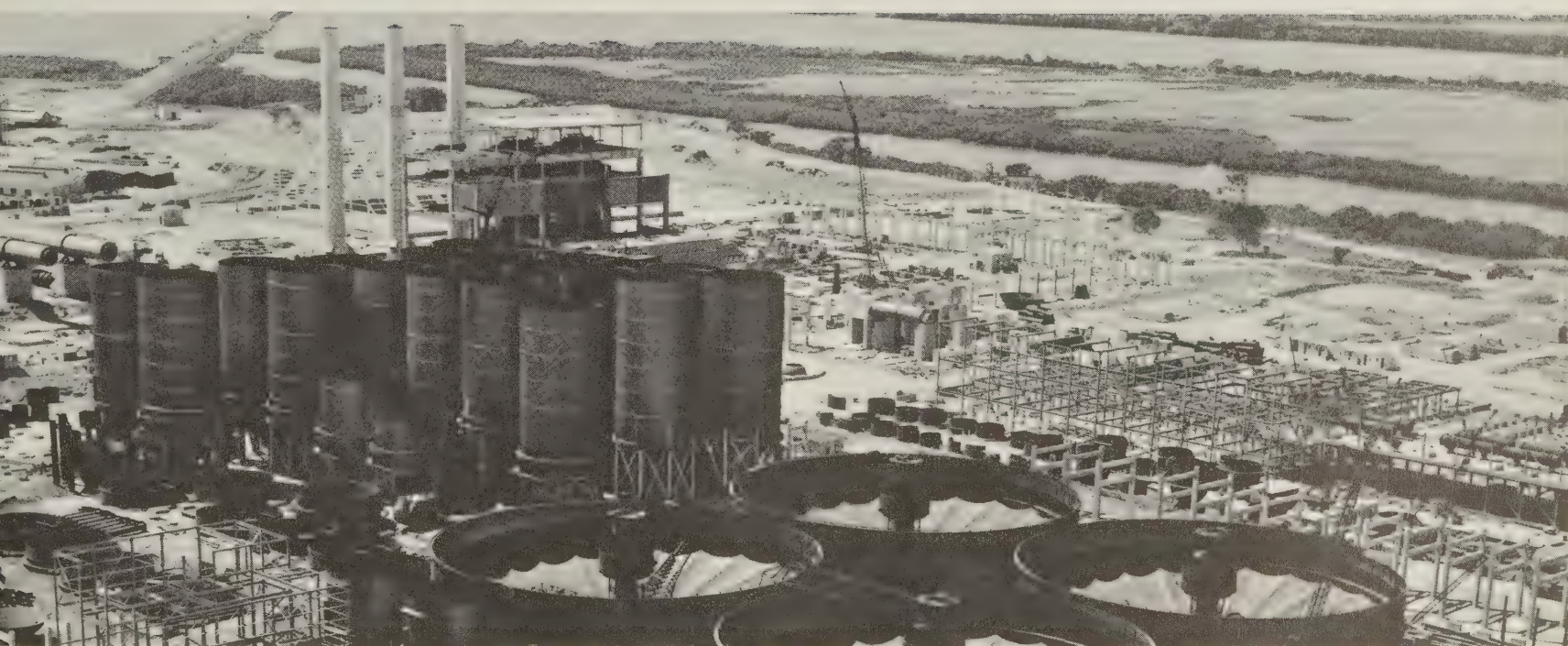
*Alumina supplies for Alcan are being augmented by new or expanded capacity in Australia (top) and Jamaica (lower). The new 670,000 ton-per-annum Gladstone plant in Queensland, in which Alcan has a 20 per cent interest, will begin production in mid-1967. The Ewarton plant (lower) is one of two Alcan plants in Jamaica being expanded to bring Alcan's total alumina capacity in Jamaica to 1.2 million tons in 1968.*



NORWAY  
*Alcan's long relationship with the Norwegian aluminum industry culminated, in January 1967, in Alcan becoming a 50 percent partner in A/S Ardal og Sunndal Verk, the important State-built primary aluminum producer.*



SOUTH AFRICA  
*Alcan Aluminium of South Africa Limited pioneered the development of the South African aluminum market before World War II. By steady expansion, Alcan has remained the principal fabricator in the Republic of South Africa.*

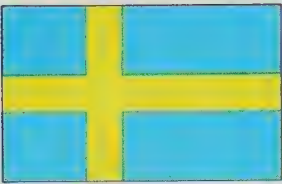






#### SPAIN

*Alcan Aluminio Iberico, S.A. is a prominent and expanding part of the Spanish aluminum industry. The products of its mill and other fabricating facilities at Alicante are sold on domestic and export markets.*



#### SWEDEN

*Alcan participates in the Swedish aluminum industry through a minority share in A/B Svenska Metallverken, a prominent operator of both smelting and fabricating facilities.*

Company's third such plant in Canada, will be ready for operation in 1967 as scheduled.

#### *Magnesium*

1966 proved to be a very satisfactory year for the Company's sales of magnesium, with an increase in volume and an improved return on sales. However, there are signs of a pause in economic growth in Germany, the Company's major market for this metal, which may indicate an adverse effect on magnesium sales in 1967.

#### **Capital Expenditure and Financing**

The Company continued to implement its program for the expansion of its fabricating facilities and, in addition, during 1966, incurred substantial expenditures for the strengthening of its raw material and ingot supply system. New projects to which the Company became committed during the year will involve significant increases in capital expenditure in 1967 and beyond.

Total expenditure on plant and investments during 1966 amounted to \$122 million of which \$39 million applied to the continuing expansion of fabricating plants, and \$81 million to enlarging the facilities for the production of bauxite, alumina and power and to new capacity and modernization of older potlines at the Company's Canadian smelters.

Cash generation was more than sufficient to meet these fixed capital outlays, along with common and preferred dividends of \$33 million, with the result that the Company's long term debt was reduced during the year by \$10 million. Available cash funds were augmented by the capital gain of \$12 million resulting from the sale of copper bus conductors which are being replaced by aluminum in the modernization program undertaken at

the Company's Canadian smelters. The amount of this capital gain was credited directly to earned surplus. Funds required to meet rising working capital requirements were provided from short-term borrowings. The only outside financing of consequence was the Rand 3 million debenture issue in South Africa.

For 1967, capital expenditures of approximately \$220 million are planned, including \$48 million for the investment in A/S Ardal og Sunndal Verk referred to on page 15 and over \$70 million for fabricating development. Almost \$100 million will be applied to the expansion of the bauxite and alumina facilities in Guyana and Jamaica, and to the establishment or enlargement of smelter capacity in Australia, Brazil, Canada, India and Japan.

#### **Litigation**

In October, Alcan Aluminium Limited with its major fabricating subsidiary in the United States, Alcan Aluminum Corporation, agreed with the U.S. Department of Justice to the filing of a consent decree in connection with the complaint filed by that Department on 30 December 1964 relating to Alcan Aluminum Corporation's acquisition of aluminum fabricating facilities owned by National Distillers and Chemical Corporation in the United States.

Under the terms of the decree, which was entered on 4th November, Alcan Aluminum Corporation agreed, during the following nine months, to offer for sale certain of the acquired assets and the business related to such assets.

The assets subject to the decree are machinery, equipment and facilities for the manufacture of Flexalum venetian blind and awning components and Flexalum residential siding, located in the former Hunter Douglas plant in



SWITZERLAND  
*Alcan's subsidiary, Aluminiumwerke A.-G. Rorschach, has a recognized reputation for the quality of its foil and sheet products. Centre d'Etudes Industrielles, a management training school now affiliated with the University of Geneva, was established by Alcan in 1946.*



TRINIDAD AND TOBAGO  
*An Alcan subsidiary, Sproston's (Trinidad) Limited, operates a plant at Port-of-Spain to form building and roofing sheet products. Another subsidiary, Chaguaramas Terminals Limited, operates a transfer station for storage and trans-shipment of bauxite.*



Riverside, California, with warehouses, inventories, receivables, and other property and property rights to make up a going business concern for producing and selling such Flexalum product lines. Under stated conditions the production assets may include the whole of the plant at Riverside. Alcan Aluminum Corporation has agreed to dispose of these assets and the related business to any eligible purchaser as defined in the decree, on terms and conditions which are reasonable under the circumstances of the suit.

A sale within the nine-month period or inability to complete any sale within that period, despite efforts made in good faith by Alcan Aluminum Corporation, will result in the termination of suit.

#### **Research and Development**

The status of the development work on the monochloride process has been described on page 9.

The need for flexibility in future smelter design was reflected in continued research and development on reduction cells, on continuous self-baking anodes of both horizontal and vertical stud configuration and, particularly, on prebaked anode cells of large and small capacity. Experimental work on improved electrolytes and automatic process control was continued.

Improvements were made in the extraction of alumina from the wide variety of bauxites contained in the Company's various properties, with particular emphasis on maximum recovery from bauxites containing substantial amounts of both monohydrate and trihydrate alumina.

Two new foundry alloys were developed and patented in 1966. One provides maximum strength in die cast parts, and the other exhibits exceptional wear resistance,

coupled with high ductility and good machineability, which makes it particularly suitable for engine, brake and other related applications.

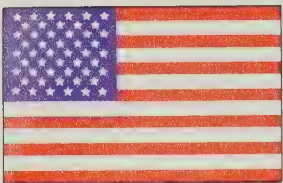
Commercial development of aluminum-zinc-magnesium alloys is proceeding at a pace consistent with the complexities of the alloy system. Considerable progress has been made in the development of optimum production practices in respect of these and other alloys.

Pulse-arc welding has been under active investigation at the Company's laboratories in Canada and England, with a view to extending the range of conventional high speed welding processes to thinner materials, and also to reducing costs. Work done to date indicates that the advantages of this technique are applicable to the fabrication of aluminum, principally in the transport and light engineering industries.

Two new additions have been made to the laboratory facilities for the investigation of transmission line conductor vibration problems, in support of sales in the electrical field. The first of these, a forced vibration test span building with the requisite testing equipment, was completed late in 1966. The second is an outdoor vibration test span which will enable studies of the behaviour of conductors and damping devices to be made in the field rather than in the laboratory.

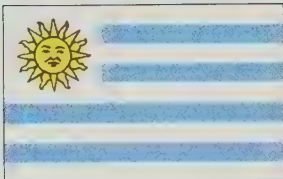
After considerable investigation, a license was obtained covering a second technique for the colour anodizing of aluminum. The new technique will provide an adequate range of colours as well as favourable investment and operating costs. While this process has only been brought to the point of its first commercial application, it is considered that it will enable the Company to enhance its position in the market for colour anodized products.





#### UNITED STATES OF AMERICA

Alcan is a major fabricator in the United States, through three subsidiary companies — Alcan Aluminum Corporation, Alcan Cable Corporation and Alcan Metal Powders — together comprising 12 plants across the country and more than 30 sales offices.



#### URUGUAY

Alcan's subsidiary, Aluminio del Uruguay S.A. is an established enterprise in Uruguay, with sheet rolling and extrusion facilities at Montevideo serving domestic and export markets.

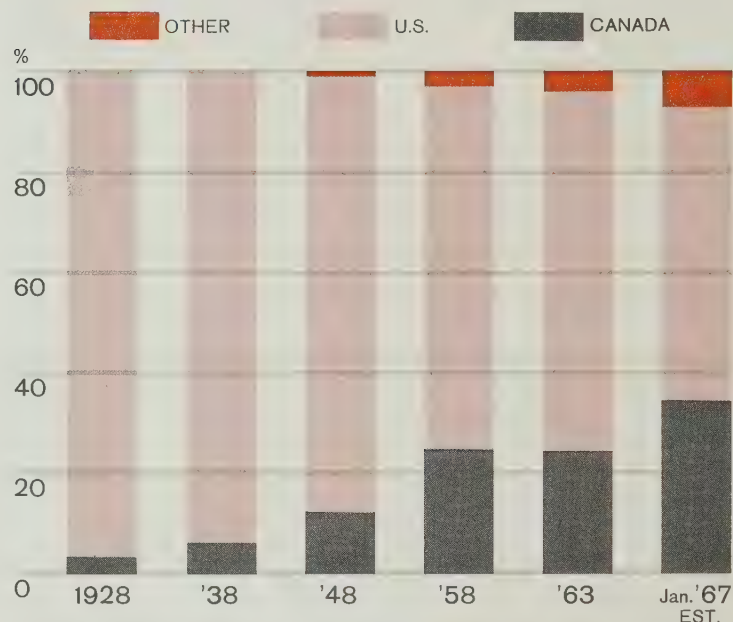
### Quality Control

The increasing sophistication of the aluminum industry as a whole has led in recent years to a very high level of stringency in the demands for product quality. Although Alcan products have always been produced under strict control, tolerances on trace impurities, alloy composition limits, metal cleanliness, gas content, grain size and metallurgical structures, are being progressively reduced, as new applications are sought and customer requirements become more demanding. To meet these demands successfully, improvements are being sought in methods for handling molten metal during transfer, and in holding, remelting and casting the metal, while better and more sensitive methods for analytical and quality control are being pursued. Substantial capital expenditures on new plant and laboratory equipment, and an increasing proportion of the time of research and development staff, has been devoted to achieving these ends. Good progress is evident. Company plants and laboratories are equipped with the latest scientific instrumentation, and with the expert staff, required both to maintain the highest possible quality standards and to continuously evaluate new control procedures as they become available.

### Geological and Mining

In the field of raw materials, an expanded exploration program for bauxite was conducted in Guyana during the year with a measure of success. In addition, more intensive evaluation of partly determined bauxite reserves was undertaken in Guyana and Jamaica. In Newfoundland, a start was made to ready a second fluorspar mine for production as required. The Company's known reserves of both bauxite and fluorspar were maintained at satisfactory levels while the search continued for new deposits of these ores in other areas.

### ALCAN ALUMINIUM LIMITED COMMON SHARES DISTRIBUTION OF OWNERSHIP



CANADA  
*Alcan Aluminium Limited (formerly named Aluminium Limited) was incorporated in Canada in 1928, to be the parent of a small group of aluminum operations in Canada and overseas. It has grown to be the largest international business concern based in Canada.*



ALCAN  
*The Alcan symbol, taken into use in 1959, is the mark of the majority of Alcan subsidiaries throughout the world. The Alcan trade name is internationally identified with leadership in aluminum products.*



## A Century of Confederation — Alcan Has Seen 67 Years

In 1967, the people of Canada are observing the Centennial of the Confederation of their country, a century of progress and the establishment of a basis of nationhood. From small beginnings, Alcan has played a role for 67 years of that century and has grown with Canada.

In 1867, at the time of Confederation, only three million people lived in the vast area that was then called "British North America". On 1st July of that year, after long debate and bitter political struggle, the new Canada came into existence with four provinces — Quebec, Ontario, Nova Scotia and New Brunswick — and a federal capital at Ottawa. Other provinces in east and west entered Confederation in later years as communications were built and settlement of the empty spaces took place.

In 1967, Canada enters the second century of Confederation as the second largest country, in area, in the world, populated by 20 million people. Canada is one of the world's greatest trading nations and is, for example, the largest customer for United States exports, while finding in the U.S.A. its largest single market for Canadian exports.

Not many years after Confederation, construction began in 1900 on the first aluminum smelter in Canada. Built to serve export markets and the rudimentary Canadian domestic demand, this smelter at Shawinigan, Quebec, had an output of 990 tons in 1902, its first full year.

Shawinigan was the cradle of the Canadian aluminum industry and was also the first unit in the structure which became Aluminum Company of Canada Ltd (also known as "Alcan") — the principal subsidiary of Alcan Alumin-

ium Limited. Today, Alcan in Canada is a major complex of plants from coast to coast, with smelting capacity this year to exceed 950,000 tons per annum. As an aluminum producer Canada stands second to the United States in the non-Communist world.

In its 67 years, Alcan has invested more than \$1,200 million in Canada; has developed 3,500,000 kilowatts of installed hydroelectric capacity. It employs 20,000 Canadians with annual payrolls in excess of \$130 million. Alcan's 1966 sales provided Canadian export revenues of almost \$340 million — and Alcan is the leading international seller of aluminum.

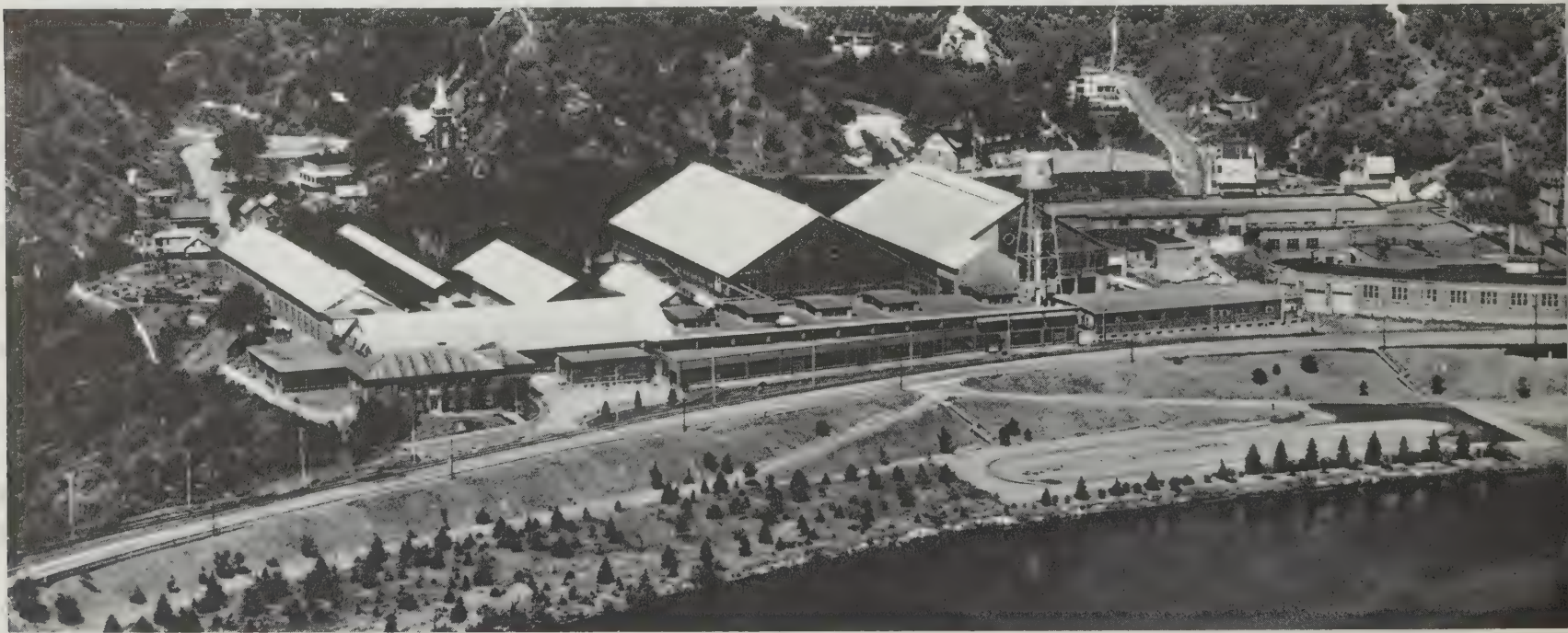
From the time of starting its first cable and rod mill at Shawinigan in 1902 and its first sheet mill at Toronto in 1913, Alcan has pioneered and fostered the aluminum fabricating industry in Canada which now employs thousands of people, not only in Alcan plants but mainly in independent establishments. About 7,000 of the Company's Canadian employees work in fabricating plants and Alcan's revenue from domestic Canadian sales, mainly fabricated products, in 1966 was in excess of \$100 million.

Alcan Aluminium Limited's common shares are broadly owned by 56,000 shareholders in the U.S., Canada and abroad. From minimal Canadian ownership at the time of the parent company's formation in 1928, the number of Alcan common shares held in Canada has increased by degrees to 35% of the total in early 1967 (See Chart X opposite). At prevailing market values (almost \$380 million), this is believed to be the largest equity investment by the Canadian public in any manufacturing or primary enterprise. Canadian holdings of Alcan preferred shares exceed \$100 million while bonds at \$30 million bring the total Canadian stake to more than \$500 million.



*In a clearing in the bush at Shawinigan, Quebec, the pioneer Alcan smelter in Canada was opened in 1901 to give birth to the Canadian aluminum industry. This historic photo shows the first potline buildings under construction in 1900. Canada is now second only to the United States in the ranks of free world aluminum producers.*

*The original Shawinigan plant was enlarged and converted to house a mill for the production of aluminum cable and wire products. Alcan first began manufacture of transmission cable in this plant in 1902. The original smelter buildings are seen still standing in the left rear. A new Shawinigan smelter on another site has an ingot capacity of 80,000 tons per annum.*





*Alcan's newest smelter in Canada is the celebrated Kitimat project on the Pacific coastline of British Columbia. The Kitimat smelter was first opened in 1954, with a capacity of 90,000 tons, after a four-year construction effort which included one of the world's largest underground powerhouses. In 1967 the smelter will reach an annual capacity of some 290,000 tons which will make it second only to Arvida in the ranks of free world smelter plants.*

*In the early 1920's, with Shawinigan well established, Alcan moved on to help develop the Saguenay River region of Quebec. A new smelter at Arvida produced its first aluminum in 1925. In later years Alcan built five more hydroelectric stations in the area. The Arvida smelter (below), already the largest in the free world, will soon reach an annual capacity of 400,000 tons.*







#### CENTENNIAL SYMBOL

Canada is represented in the Centennial symbol by eleven triangles arranged in the shape of the Canadian maple leaf. There is one triangle for each of the ten provinces of Canada and one to represent the great Canadian Northland.



#### EXPO SYMBOL

The theme of Expo 67 in Montreal this year is "Man and His World". The ancient symbol for worshipping man is a vertical line with elevated arms. In pairs, it represents friendship; in a circle, the world-wide interdependence of men.

## Alcan at Expo 67

The Centennial of Confederation is being observed throughout Canada in 1967 in a multitude of ways. Across the country, Canadians will dedicate permanent and functional memorials to their Centennial, hundreds of new structures including recreational and cultural facilities intended to enrich Canadian life. Special exhibitions and entertainments will take place in all provinces. The largest single event will be "Expo 67" — the Universal and International Exhibition of 1967 — to be staged in Montreal. This is the first official "First Category World Exhibition" ever to be held in the Western hemisphere.

At least 62 nations, the greatest number yet to take part in an official world's fair, will be participants, sponsoring pavilions or exhibits based on the theme, "Man and His World". The Government of Canada as host is joined by the Province of Quebec and the City of Montreal. The dates are 28th April to 27th October 1967.

As a corporate citizen in the host country, Alcan has joined with the City of Montreal to build an aquarium which will be one of the many features of Expo 67. To be known officially as the Montreal Aquarium, the project consists initially of two main buildings. The first is the Alcan Pavilion which forms the Aquarium proper, containing 23 glass-fronted aquaria to display fish and marine life from many corners of the globe. The second is the Alcan Dolphin Pool which will present an aquatic show of trained dolphins in an arena seating 900 spectators. The Montreal Aquarium will be owned and operated by the City of Montreal as an educational, entertainment and tourist asset, to remain as a permanent addition to the City after Expo 67 has closed.

## New Alcan Concept in Housing

In this Centennial year, Alcan in Canada is undertaking a marketing project which may prove to be the most significant thus far in the Company's history. This involves the establishment of a factory for the assembly-line production of a whole new series of fully-finished homes to meet unsatisfied demand.

Recognizing that traditional on-site construction methods have placed quality single-family housing beyond the financial reach of a great many wage earners, Alcan will provide its factory-built homes at \$10,000 to \$12,000 each, for three and four-bedroom, two-bathroom houses. This price excludes the land but includes all major electrical appliances and all furniture for immediate occupancy.

The homes will be delivered from the factory in two completed halves, mounted on wheels for highway travel and ready for rapid joining together on site. Franchised builder-distributors will provide the lot, prepare the foundation and sell the homes.

The construction of these homes conforms with the requirements of the National Building Code in Canada and has received acceptance from the Canadian government's Central Mortgage and Housing Corporation. The project represents the second stage of Alcan Design Homes Limited's program in housing development and is being launched after several years of successful experience in building more expensive homes across Canada.

The first factory is to be built near Toronto, Ontario, this year. Production of houses using automobile assembly-line techniques will commence in the autumn of 1967 at a rate of 100 homes per month, capable of being doubled by adding a second shift at no additional capital cost.



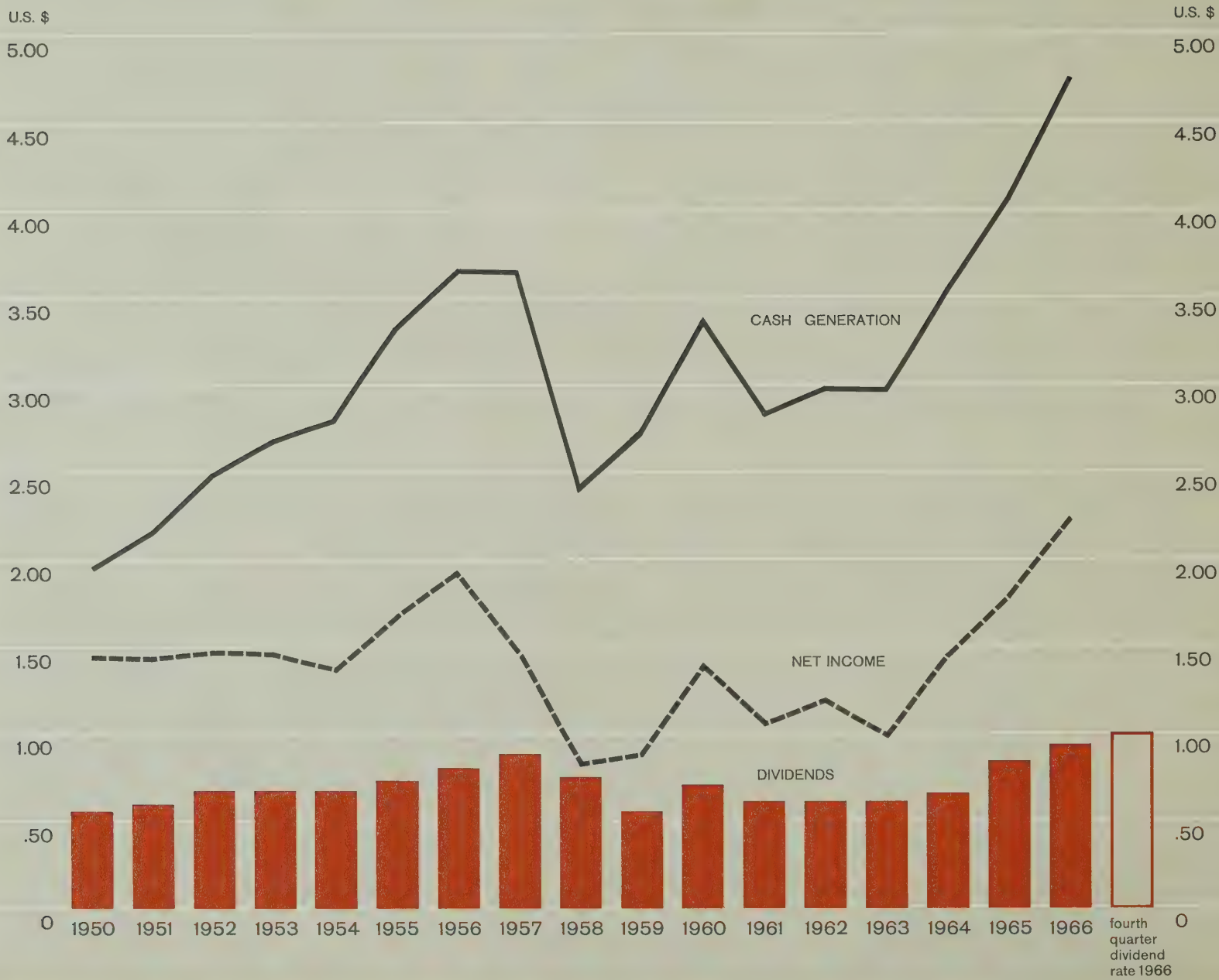
*Alcan factory-assembled homes will be available in four models, each with a choice of three exterior treatments and each possessing integrity of design. At least 1,000 pounds of pre-finished Alcan aluminum products are used in each house, along with other quality building materials. This smallest model has a floor area of 1104 square feet — selling price about \$10,500 excluding lot.*

*Each of these Alcan homes comes fully equipped with major household appliances including electric refrigerator, stove, dishwasher, clothes washer and clothes dryer, and all furnished for immediate occupancy, even to curtains and wall pictures. Prototype houses already erected in Montreal and Toronto have been enthusiastically received.*





# ALCAN CONSOLIDATED—U.S. \$ PER COMMON SHARE





# Alcan Aluminium Limited and Subsidiary Companies

## Comparative Financial Statistics

(as adjusted)

Year	Total Assets before Reserves	Sales and Operating Revenues	Net Income before			Number of Common Shares(2) (Millions)	Per common share		
			Depreciation and Income Taxes	Current Income Taxes	"Cash Income"(1)		Capital Stock & Surplus	Profit(3)	Cash Dividends
			(millions of Canadian dollars)				(Canadian dollars)		
1937	98	49	13	2	11	22.3	2	.36	0
1938	144	66	20	5	15	22.3	2	.49	0
1939	158	92	28	8	20	22.3	3	.69	.14
1940	209	82	38	22	16	22.3	3	.49	.27
1941	324	132	53	15	38	22.3	3	.65	.33
1942	446	198	75	12	63	22.3	4	.69	.33
1943	528	290	96	14	82	22.3	4	.52	.33
1944	523	259	81	11	70	22.3	4	.49	.27
1945	480	114	26	8	18	22.3	4	.52	.27
1946	490	111	28	10	18	22.3	5	.54	.30
1947	514	153	38	15	23	22.3	5	.72	.33
1948	587	209	56	20	36	22.3	6	1.22	.44
1949	612	197	57	20	37	22.3	6	1.21	.43
1950	698	226	73	26	47	22.3	7	1.56	.59
1951	809	283	92	36	56	24.6	9	1.51	.62
1952	972	332	95	35	60	24.6	9	1.44	.65
1953	1,125	336	97	26	71	27.0	10	1.44	.66
1954	1,182	327	95	21	74	27.1	11	1.32	.65
1955	1,313	414	124	26	98	29.9	12	1.66	.71
1956	1,472	481	139	31	108	30.0	14	1.90	.77
1957	1,635	454	114	8	106	30.2	14	1.41	.84
1958	1,741	421	82	9	73	30.3	14	.80	.73
1959	1,829	448	93	13	80	30.4	15	.84	.53
1960	1,916	509	124	25	99	30.6	15	1.34	.68
1961	1,965	517	113	25	88	30.7	15	1.08	.61
1962	2,060	559	129	32	97	30.7	15	1.27	.64
1963	2,189	670	127	28	99	31.0	16	1.07	.65
1964	2,276	728	166	47	119	31.1	17	1.57	.70
1965	2,486	890	196	59	137	31.1	18	1.93	.89
1966	2,643	998	215	54	161	31.1	20	2.41	1.00

(1) 1950 and thereafter is before deferred income taxes—see note 5 to financial statements.

(2) Outstanding at end of each year, adjusted for stock dividends and splits.

(3) After preferred dividends.

# Alcan Aluminium Limited and Subsidiary Companies

## Consolidated Balance Sheet—Assets

31st December 1966

	in Canadian dollars	
	1966	1965
CURRENT ASSETS:		
Cash . . . . .	\$ 25,239,784	\$ 27,404,633
Time deposits and Government of Canada securities, at cost . . . . .	20,846,096	18,079,014
Receivables . . . . .	203,667,836	184,608,810
Inventories of aluminum, materials and supplies (note 2) . . . . .	327,248,241	312,560,081
	<u>577,001,957</u>	<u>542,652,538</u>
Deferred receivables . . . . .	19,774,329	12,837,441
Prepaid expense and deferred charges . . . . .	11,460,010	7,773,194
Investments in companies not consolidated (notes 1 and 3) . . . . .	58,442,576	57,954,702
Land, plants, riparian rights, and facilities, at cost (note 4) . . . . .	1,976,018,721	1,864,325,816
Less: Accumulated depreciation and depletion (note 5) . . . . .	907,122,038	840,278,110
	<u>1,068,896,683</u>	<u>1,024,047,706</u>
	<u>\$1,735,575,555</u>	<u>\$1,645,265,581</u>



## Consolidated Balance Sheet—Liabilities

31st December 1966

	in Canadian dollars	
	1966	1965
<b>CURRENT LIABILITIES:</b>		
Payables . . . . .	\$ 120,371,882	\$ 92,648,789
Short-term bank borrowings (principally in foreign currencies) . . . . .	74,373,355	54,437,678
Income and other taxes . . . . .	40,133,005	53,533,244
Other debt payable within one year (note 17) . . . . .	10,007,062	11,104,868
	<u>244,885,304</u>	<u>211,724,579</u>
Debt not maturing within one year (note 17) . . . . .	578,711,539	587,366,699
Deferred income taxes (note 5) . . . . .	145,506,263	136,772,509
Preferred shares of subsidiaries and other minority interests (note 6) . . . . .	82,464,974	83,303,181
<b>CAPITAL STOCK AND SURPLUS:</b>		
4¼% Cumulative redeemable convertible preferred shares, par \$40 (note 7)		
Authorized and outstanding — 1,500,000 shares . . . . .	60,000,000	60,000,000
Common shares without nominal or par value (note 7)		
Authorized — 60,000,000 shares		
Outstanding — 31,137,066 shares (1965 — 31,086,642) . . . . .	156,458,578	154,976,269
Earned surplus (note 8) . . . . .	467,548,897	411,122,344
	<u>684,007,475</u>	<u>626,098,613</u>
	<u><u>\$1,735,575,555</u></u>	<u><u>\$1,645,265,581</u></u>

Approved by the Board: NATHANAEL V. DAVIS, Director

DANA T. BARTHOLOMEW, Director

# Alcan Aluminium Limited and Subsidiary Companies

## Consolidated Statement of Income

year ending 31st December 1966

	in Canadian dollars	
	1966	1965
<b>SALES AND REVENUES:</b>		
Sales . . . . .	\$ 929,490,600	\$ 821,399,633
Operating revenues (transportation services, power sales, etc.) . . . . .	68,799,295	68,917,320
Equity in income of companies 50% owned (notes 1 and 3) . . . . .	3,494,000	3,101,732
Other income (note 9) . . . . .	5,491,414	6,075,595
	<u>1,007,275,309</u>	<u>899,494,280</u>
<b>COSTS AND EXPENSES:</b>		
Cost of sales and operating expenses . . . . .	669,224,605	589,144,322
Provision for depreciation and depletion (note 5) . . . . .	74,601,560	72,761,769
Selling, research and administrative expenses . . . . .	77,717,328	68,622,666
Interest on debt not maturing within one year . . . . .	27,414,523	27,707,397
Other interest . . . . .	6,847,313	5,376,271
Other expenses (note 10) . . . . .	6,791,069	6,973,924
	<u>862,596,398</u>	<u>770,586,349</u>
Income before income taxes . . . . .	144,678,911	128,907,931
Provision for income taxes:		
Current . . . . .	54,214,304	58,587,165
Deferred (note 5) . . . . .	8,733,754	1,662,983
	<u>62,948,058</u>	<u>60,250,148</u>
Income after income taxes . . . . .	81,730,853	68,657,783
Dividends on preferred shares of subsidiaries and other minority interests . . . . .	4,064,512	6,209,644
Net income . . . . .	<u>\$ 77,666,341*</u>	<u>\$ 62,448,139</u>
*Excluding \$12.3 million gain from sale of copper conductor, credited to earned surplus.		

## Consolidated Statement of Earned Surplus

year ending 31st December 1966

	in Canadian dollars	
Earned surplus — 31st December 1965 . . . . .		\$411,122,344
Net income for the year . . . . .		77,666,341
Non-recurring capital gain from sale of fixed assets (copper conductor) . . . . .		12,300,311
		<u>501,088,996</u>
Alcan Aluminium Limited dividends:		
Preferred . . . . .	\$ 2,550,000	
Common (1965 — \$27,625,480) . . . . .	30,990,099	33,540,099
Earned surplus — 31st December 1966 (note 8) . . . . .		<u>\$467,548,897</u>



# Alcan Aluminium Limited and Subsidiary Companies

## Notes to Financial Statements

### 1. Principles of Consolidation:

The consolidated financial statements include the accounts of all companies more than 50% owned. In addition, under the equity accounting principle, Alcan Aluminium Limited's equity in the aggregate net income of all companies 50% owned is included in consolidated net income; the book value of the investments in these companies is increased by an equivalent amount less dividends received (see note 3). All intercompany items and transactions between subsidiaries, including profits in inventories, have been eliminated.

Accounts, other than Canadian currency accounts, included in the consolidated balance sheet are translated into Canadian dollars at rates of exchange current at 31st December 1966, except that (a) certain fixed bank deposits, inventories, investments and fixed assets with related provisions for depreciation and depletion are at rates current at dates of acquisition, and (b) debts not maturing within one year, with a minor exception, are at rates current at dates of original borrowing. Accounts in the consolidated statement of income, except provisions for depreciation and depletion, are translated at average exchange rates prevailing during the year.

### 2. Inventories of Aluminum, Materials and Supplies:

Inventories, as summarized below, are stated at lower of cost (determined for the most part on the monthly average method) or market:

	1966	1965
Aluminum . . . . .	\$192,884,373	\$189,435,862
Raw materials . . . . .	80,150,059	73,465,598
Supplies . . . . .	54,213,809	49,658,621
	<u>\$327,248,241</u>	<u>\$312,560,081</u>

### 3. Investments in Companies not Consolidated:

	1966	1965
Companies 50% owned — cost plus equity in undistributed income (note 1)		
(Cost 1966 — \$21,375,838; 1965 — \$21,340,193) . . . . .	\$41,112,344	\$39,903,622
Companies less than 50% owned, at cost . . . . .	17,330,232	18,051,080
	<u>\$58,442,576</u>	<u>\$57,954,702</u>

The following is a summary of the assets and liabilities, in millions of dollars, at 31st December 1966, of the companies 50% owned, located principally in Japan and Norway.

#### ASSETS

Current assets . . . . .	\$ 95
Investments . . . . .	38
Fixed assets . . . . .	191
Less: Depreciation, etc. . . . .	(76)
	<u>\$248</u>

#### LIABILITIES

Current liabilities . . . . .	\$ 65
Funded debt . . . . .	101
Equity:	
Alcan Aluminium Limited . . . . .	41
Other shareholders . . . . .	41
	<u>\$248</u>

As shown in the consolidated statement of income, Alcan Aluminium Limited's share in the net income of the companies 50% owned amounted to \$3.5 million in 1966 (\$3.1 in 1965); dividends received from these companies amounted to \$2.3 million in 1966 (\$2.2 in 1965).

### 4. Land, Plants, Riparian Rights, and Facilities:

	1966	1965
Land and water rights . . . . .	\$ 61,691,448	\$ 61,094,454
Mineral properties, rights and development . . . . .	16,243,293	15,937,540
Buildings, machinery and equipment . . . . .	1,813,572,647	1,730,475,008
	<u>1,891,507,388</u>	<u>1,807,507,002</u>
Construction work in progress . . . . .	84,511,333	56,818,814
	<u>\$1,976,018,721</u>	<u>\$1,864,325,816</u>

Capital projects, other than the acquisition referred to in note 15, are expected to involve the expenditure of some \$170 million during 1967.

## Notes to Financial Statements

### 5. Depreciation Policy and Deferred Income Taxes:

With minor exceptions, depreciation recorded in the accounts is calculated at straight-line rates based on the estimated useful lives of the respective assets. Depletion, not significant in amount, is calculated on the unit of production basis.

Income tax regulations in Canada, and in certain other countries, permit the use (for the purpose of determining income taxes) of various forms of capital cost allowances which do not coincide with the amount of depreciation recorded in the accounts. These allowances generally exceed straight-line depreciation during the early life of new assets and later fall short of it.

When capital cost allowances utilized for determining income taxes exceed straight-line depreciation, an amount equivalent to the resultant reduction in current income taxes is charged to income and credited to Deferred Income Taxes. When the allowances so utilized fall short of straight-line depreciation, resulting in higher current income taxes than would otherwise be payable, an appropriate portion of the amount previously deferred is transferred back to income.

### 6. Preferred Shares of Subsidiaries and Other Minority Interests:

Cumulative Redeemable Preferred Shares:	1966	1965
Aluminum Company of Canada, Ltd:		
4% Sinking fund first preferred shares . . . . .	\$ 8,259,325	\$ 8,629,875
4½% Sinking fund second preferred shares . . . . .	49,240,850	50,731,350
Other . . . . .	1,869,835	1,329,200
	<u>59,370,010</u>	<u>60,690,425</u>
Minority interests in equity of subsidiaries . . . . .	23,094,964	22,612,756
	<u>\$82,464,974</u>	<u>\$83,303,181</u>

### 7. Capital Stock:

Common shares outstanding were increased during 1966 by the issuance of 6,200 shares at \$30.40 per share under the 1964 offerings of the Employee Share Purchase Plans and by 709 shares at \$40.50 per share under the 1966 offerings. The prices were fixed under the terms of the Plans at 92% of the market price at the time of the offerings. At 31st December 1966, 2,968 shares remained to be purchased by employees under the 1966 offerings and 553,478 shares were available for offerings until 30th April 1969.

Further increases, indicated below, resulted from the exercise of options granted to officers and other employees under the first and second Share Option Plans approved by the shareholders, at prices fixed at market prices at times of grant. As these plans had expired, no options could be granted under them during 1966.

Option price and year of grant	Shares under option 1st January 1966	Year 1966		Shares under option 31st December 1966*
		Exercised	Expired or Cancelled	
\$36.50 — 1959	110,600	6,440	1,000	103,160
30.75 — 1960	58,705	12,865	1,000	44,840
33.875 — 1961	1,500	750	—	750
25.875 — 1963	79,500	21,150	—	58,350
26.75 — 1963	33,200	2,310	—	30,890
	<u>283,505</u>	<u>43,515</u>	<u>2,000</u>	<u>237,990</u>

\*Including 12,000 shares under options granted to directors and officers of Alcan Aluminium Limited in 1959, 2,000 shares in 1960, 22,500 shares in 1963 at \$25.875 per share and 7,500 shares at \$26.75 per share.

At 31st December 1966, 300,000 shares were available until 15th April 1971 for the granting of options under the third Share Option Plan, approved by the shareholders on 28th April 1966, and 1,500,000 common shares were subject to issuance under the conversion privileges of the 4¼% cumulative redeemable convertible preferred shares. The preferred shares may be converted into common shares on a share per share basis at any time prior to 15th July 1973 and may be redeemed in whole or in part at any time at the option of the Board of Directors on thirty days' notice at \$43 per share.

In January 1967, 1,100,000 common shares were issued in acquiring a 50% interest in A/S Ardal og Sunndal Verk (see note 15).



## 8. Dividend Restrictions:

Consolidated earned surplus at 31st December 1966 includes approximately \$163 million which, pursuant to the provisions of certain debt issues of Aluminum Company of Canada, Ltd, is not distributable in dividends either in cash or in kind to Alcan Aluminium Limited, the holder of its common shares.

## 9. Other Income:

	1966	1965
Income from companies less than 50% owned . . . . .	\$ 838,865	\$ 800,716
Income from time deposits and Government of Canada securities . . . . .	2,808,238	1,698,382
Gain from sale of fixed assets . . . . .	699,730	2,974,509
Other . . . . .	1,144,581	601,988
	<u>\$5,491,414</u>	<u>\$6,075,595</u>

## 10. Other Expenses:

	1966	1965
Supplemental Compensation Plan . . . . .	\$3,276,195	\$2,359,429
Loss on redemption of debt . . . . .	49,223	2,030,613
Other . . . . .	3,465,651	2,583,882
	<u>\$6,791,069</u>	<u>\$6,973,924</u>

## 11. Supplemental Compensation Plan:

Under the Supplemental Compensation Plan for certain employees that was approved by the shareholders in 1963, there is credited annually to a reserve an amount equivalent to one-tenth of the excess, if any, of net income over a 6% return on capital investment, both as defined in the Plan.

The purpose of the Plan is to provide an incentive and a reward to employees who contribute substantially to the success of the enterprise, through the quality of their performance or the character of their service, by affording them a means of participating in that success. A committee made up of certain directors not eligible for supplemental compensation determines the allotments to employees. Allotments are generally payable over a period of four years.

The credit to the reserve for 1966 and the amount remaining in the reserve at 31st December 1966 have been determined by the Company's auditors, as required by the Plan, as follows:

Net income for the year before the credit to the reserve . . . . .	\$80,942,536
Add:	
Interest on debt not maturing within one year . . . . .	27,414,523
Dividends on preferred shares of subsidiaries and other minority interests . . . . .	4,064,512
Plan net income . . . . .	112,421,571
Less:	
6% return on capital investment (principally debt not maturing within one year, capital stock and surplus) . . . . .	79,659,621
Excess of plan net income over 6% return on capital investment . . . . .	32,761,950
Credit to the reserve — 10% . . . . .	<u>\$ 3,276,195</u>
Balance in the reserve, 31st December 1965 . . . . .	\$ 2,581,453
Allotments in 1966 . . . . .	1,394,000
	1,187,453
Credit to the reserve for the year 1966 (as above) . . . . .	3,276,195
Balance in the reserve (included in current liabilities), 31st December 1966 . . . . .	<u>\$ 4,463,648</u>

## Notes to Financial Statements

### 12. Pension Plans:

The Company and its subsidiaries (with some exceptions) have established pension plans in the principal countries where they operate, for the greater part contributory and generally open to all employees. In 1966, the companies made contributions of \$6,615,000 to these plans which are virtually fully funded.

### 13. Commitments:

A subsidiary company, Saguenay Shipping Limited, has charter hire commitments amounting to \$10.3 million in 1967 (\$20.8 million paid in 1966), \$9.1 million in 1968, \$7.4 million in 1969, \$5.2 million in 1970, \$3.1 million in 1971, \$2.5 million in 1972 and lesser amounts up to 1978. See also reference to capital expenditures in note 4.

### 14. Geographical Distribution of Assets and Liabilities:

A condensed analysis of the balance sheet at 31st December 1966 according to the domicile of the constituent companies and their branches, follows:

	North America	South America and Caribbean	United Kingdom and Continental Europe	All Other	Total
	(in millions of dollars)				
<b>ASSETS:</b>					
Current assets . . . . .	\$ 294	\$ 67	\$ 151	\$ 65	\$ 577
Investments . . . . .	3	1	27	28	59
Fixed assets . . . . .	1,403	289	158	126	1,976
Less: Depreciation, etc. . . . .	(659)	(137)	(65)	(46)	(907)
Other assets . . . . .	22	8	1	—	31
	<u>1,063</u>	<u>228</u>	<u>272</u>	<u>173</u>	<u>1,736</u>
<b>LIABILITIES:</b>					
Current liabilities . . . . .	114	43	59	29	245
Funded debt . . . . .	502	11	42	24	579
Deferred income taxes . . . . .	130	6	5	5	146
Preferred shares, etc. . . . .	123	1	5	13	142
	<u>869</u>	<u>61</u>	<u>111</u>	<u>71</u>	<u>1,112</u>
Common shareholders' equity . . . . .	<u>\$ 194</u>	<u>\$ 167</u>	<u>\$ 161</u>	<u>\$ 102</u>	<u>\$ 624</u>

### 15. Acquisition in 1967:

As more fully explained on pages 5 and 15, in January 1967 Alcan Aluminium Limited acquired 50 per cent of the shares of A/S Ardal og Sunndal Verk from the Kingdom of Norway under an agreement providing for the exchange of these shares for 1,100,000 common shares of Alcan Aluminium Limited plus U.S. \$4.0 million of 6% promissory notes payable in five equal annual installments. Based on the average market price of Alcan Aluminium Limited shares during the negotiation period, the capital stock account will be credited with Can. \$43.5 million.

### 16. Statutory Information:

Total remuneration received by the directors of Alcan Aluminium Limited (including the salaries of officers who are also directors) amounted to \$649,523 in 1966.



# 17. Debt not Maturing Within One Year:

## Aluminum Company of Canada, Ltd:

Revolving credit loans from banks, under U.S. \$60,000,000 credit agreement, convertible at the company's option on or before maturity (1st May 1969) into term loans repayable in five equal consecutive annual installments beginning one year from date of conversion (U.S. \$36,000,000)

1966	1965
\$ 37,874,446	\$ 26,042,571

First mortgage 3½% sinking fund bonds, due 1974:

Series "A"

Series "B" (U.S. \$5,466,000)

Commutation value of contractual obligation for annual payments secured by second hypothec—payable in Canadian and United States currencies, in equal parts

3½% Sinking fund debentures, due 1971

3¾% Sinking fund debentures, due 1970 (U.S. \$18,528,000)

4½% Sinking fund debentures, due 1973

4½% Sinking fund debentures, due 1980 (U.S. \$81,135,000)

5.10% Notes, due 1968/1992 (U.S. \$100,000,000)

Redeemable notes—payable to the U.K. Government—interest and \$29,985,000 of principal abatable in certain circumstances as provided in the contracts under which they were issued:

3% Notes, due 1971

3½% Notes, due 1971

3½% Notes, due 1974

2,692,000	2,692,000
5,466,000	6,228,000
5,400,000	5,625,000
21,442,000	23,670,000
18,232,710	24,753,108
29,115,000	31,176,000
78,520,311	83,171,431
97,586,489	97,586,489
54,950,000	54,950,000
24,975,000	24,975,000
40,000,000	40,000,000

## Alcan Aluminum Corporation:

4¾% 20-year notes (U.S. \$40,000,000)

Non-interest bearing serial notes, due 1967/1975 (U.S. \$25,546,773)

43,036,000	43,036,000
27,440,073	30,488,655

## Alcan Aluminiumwerke G.m.b.H.:

Mortgage loans (D.M. 23,000,000)

6,037,797	6,464,383
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## Alcan Industries Limited:

6% Debentures, due 1983 (£2,800,000)

Bank loan, due 1968 (£3,000,000)

8,793,412	9,107,462
9,015,625	9,015,625

## Alcan Jamaica Limited:

Bank loans, due 1968 (£4,000,000)

10,815,620	10,815,620
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## Alcan (U.K.) Limited:

Bank loans, due 1967/1970 (£5,460,000)

16,479,095	16,248,840
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## Alcan Australia Limited:

Various issues, due 1967 to 1975 (A \$9,069,000)

10,081,572	11,562,020
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## Indian Aluminium Company, Ltd.:

6¼% Debenture stock, due 1970/1975 (Rps. 28,230,000)

Other debt (Rps. 11,859,809 and £500,000)

5,637,532	5,435,102
3,669,242	3,955,975

## Saguenay Power Company Ltd.:

First Mortgage 3% sinking fund bonds, due 1971 (U.S. \$8,399,000)

8,399,000	9,812,000
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## Other:

Bank loans

Other

16,316,817	13,744,975
6,642,874	7,997,911

588,618,615	598,554,167
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Less: Debt payable within one year included in current liabilities (equivalent to \$10,007,062 at year-end rates of exchange)

9,907,076	11,187,468
\$578,711,539	\$587,366,699

Allowing for payments already made, sinking fund and other requirements over the next five years against the above debt, other than bank loans, amount to approximately \$5.9 million in 1967, \$20.8 million in 1968, \$25.1 million in 1969, \$22.9 million in 1970 and \$122.7 million in 1971.



# Alcan Aluminium Limited and Subsidiary Companies

## Source and Application of Funds

year ending 31st December 1966

	in millions of Canadian dollars	
	1966	1965
Cash and short-term investments (beginning of year) . . . . .	\$ 45	\$ 62
<b>SOURCE OF FUNDS:</b>		
Net income . . . . .	78	62
Straight-line depreciation . . . . .	74	73
Deferred income taxes . . . . .	9	2
Gain from sale of copper conductor . . . . .	12	—
Alcan Aluminium Limited common shares (employee purchases) . . . . .	1	1
Net increase in short-term bank borrowings . . . . .	20	12
Other . . . . .	3	8
	<u>197</u>	<u>158</u>
	<u>\$242</u>	<u>\$220</u>
<b>APPLICATION OF FUNDS:</b>		
Plant and investments . . . . .	\$122	\$143
Increase in deferred receivables, etc. . . . .	11	—
Net decrease in debt not maturing within one year . . . . .	10	(65)
Aluminum Company of Canada, Ltd preferred share redemptions . . . . .	1	2
Alcan Aluminium Limited preferred dividends . . . . .	2	2
Alcan Aluminium Limited common dividends . . . . .	31	28
Increase in working capital (excluding cash and short-term investments, short-term bank borrowings and other debt payable within one year) . . . . .	19	65
	<u>196</u>	<u>175</u>
	<u>\$242</u>	<u>\$220</u>
Cash and short-term investments (end of year) . . . . .	46	45
	<u>\$242</u>	<u>\$220</u>

## Auditors' Report

### PRICE WATERHOUSE & CO.

5 Place Ville Marie, Montreal 2  
21st February 1967

To the Shareholders of Alcan Aluminium Limited:

We have examined the consolidated balance sheet of Alcan Aluminium Limited and subsidiary companies as at 31st December 1966 and the consolidated statements of income, earned surplus, and source and application of funds for the year then ended. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of Alcan Aluminium Limited and subsidiary companies as at 31st December 1966 and the results of their operations and the source and application of their funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

*Price Waterhouse & Co.*  
Chartered Accountants







**ALCAN ALUMINIUM LIMITED 1966 ANNUAL REPORT**